Conforms to US OSHA Hazard Communication 29CFR1910.1200

SAFETY DATA SHEET

Agilent Technologies

Calibrated Solutions Kit, Part Number 9910085200

Section 1. Identification

1.1 Product identifier

Product name : Calibrated Solutions Kit, Part Number 9910085200

Part no. (chemical kit) : 9910085200

Part no. :

Hexane Blank	Not available.
Water Blank	Not available.
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	Not available.
Potassium Chloride Reference Cell	Not available.
Sodium Iodide Reference Cell	Not available.
Potassium Dichromate Reference Cell - 60	Not available.
Potassium Dichromate Reference Cell - 600	Not available.
Perchloric Acid Blank	Not available.
Sodium Nitrite Reference Cell	Not available.
Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Validation date : 7/18/2023

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Reagents and Standards for Analytical Chemistry Laboratory Use
12 sealed quartz cuvettes

Hexane Blank	3 ml
Water Blank	3 ml
Holmium Perchlorate Reference Cell	3 ml
Hexane Reference Cell	3 ml
Potassium Chloride Reference Cell	3 ml
Sodium Iodide Reference Cell	3 ml
Potassium Dichromate Reference Cell - 60	3 ml
Potassium Dichromate Reference Cell - 600	3 ml
Perchloric Acid Blank	3 ml
Sodium Nitrite Reference Cell	3 ml
Potassium Dichromate Reference Cell - 40 mg/L	3 ml
Potassium Dichromate Reference Cell - 120 mg/L	3 ml

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status :

Hexane Blank	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Water Blank	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Holmium Perchlorate Reference Cell	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Hexane Reference Cell	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Potassium Chloride Reference Cell	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Sodium Iodide Reference Cell	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Potassium Dichromate Reference Cell - 60	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Potassium Dichromate Reference Cell - 600	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Perchloric Acid Blank	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Sodium Nitrite Reference Cell	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Potassium Dichromate Reference Cell - 40 mg/L	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Potassium Dichromate Reference Cell - 120 mg/L	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture

Hexane Blank

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN IRRITATION - Category 2
H320	EYE IRRITATION - Category 2B
H361	TOXIC TO REPRODUCTION - Category 2
H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Section 2. Hazards identification

H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
H304	ASPIRATION HAZARD - Category 1
H411	AQUATIC HAZARD (LONG-TERM) - Category 2

Holmium Perchlorate Reference Cell

H272	OXIDIZING LIQUIDS - Category 2
H314	SKIN CORROSION - Category 1
H318	SERIOUS EYE DAMAGE - Category 1
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Hexane Reference Cell

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN IRRITATION - Category 2
H320	EYE IRRITATION - Category 2B
H361	TOXIC TO REPRODUCTION - Category 2
H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
H304	ASPIRATION HAZARD - Category 1
H411	AQUATIC HAZARD (LONG-TERM) - Category 2

Sodium Iodide Reference Cell

H372	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
H412	AQUATIC HAZARD (LONG-TERM) - Category 3

Potassium Dichromate Reference Cell - 600

H400	AQUATIC HAZARD (ACUTE) - Category 1
H412	AQUATIC HAZARD (LONG-TERM) - Category 3

Sodium Nitrite Reference Cell

H302	ACUTE TOXICITY (oral) - Category 4
H371	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2
H400	AQUATIC HAZARD (ACUTE) - Category 1
H410	AQUATIC HAZARD (LONG-TERM) - Category 1

Holmium Perchlorate Reference Cell	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 3.6%

2.2 GHS label elements

Section 2. Hazards identification

Hazard pictograms :

Hexane Blank

Holmium Perchlorate Reference Cell

Hexane Reference Cell

Sodium Iodide Reference Cell

Potassium Dichromate Reference Cell - 600

Sodium Nitrite Reference Cell

Signal word :

Hexane Blank	Danger
Water Blank	No signal word.
Holmium Perchlorate Reference Cell	Danger
Hexane Reference Cell	Danger
Potassium Chloride Reference Cell	No signal word.
Sodium Iodide Reference Cell	Danger
Potassium Dichromate Reference Cell - 60	No signal word.
Potassium Dichromate Reference Cell - 600	Warning
Perchloric Acid Blank	No signal word.
Sodium Nitrite Reference Cell	Warning
Potassium Dichromate Reference Cell - 40 mg/L	No signal word.
Potassium Dichromate Reference Cell - 120 mg/L	No signal word.

Hazard statements :

Hexane Blank

H225 - Highly flammable liquid and vapor.
H304 - May be fatal if swallowed and enters airways.
H315 + H320 - Causes skin and eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H361 - Suspected of damaging fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure. (nervous system) (inhalation)
H411 - Toxic to aquatic life with long lasting effects.

Water Blank

No known significant effects or critical hazards.

Section 2. Hazards identification

Holmium Perchlorate Reference Cell	H272 - May intensify fire; oxidizer. H314 - Causes severe skin burns and eye damage. H373 - May cause damage to organs through prolonged or repeated exposure.
Hexane Reference Cell	H225 - Highly flammable liquid and vapor. H304 - May be fatal if swallowed and enters airways. H315 + H320 - Causes skin and eye irritation. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. H361 - Suspected of damaging fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure. H411 - Toxic to aquatic life with long lasting effects.
Potassium Chloride Reference Cell	No known significant effects or critical hazards.
Sodium Iodide Reference Cell	H372 - Causes damage to organs through prolonged or repeated exposure. H412 - Harmful to aquatic life with long lasting effects.
Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
Potassium Dichromate Reference Cell - 600	H400 - Very toxic to aquatic life. H412 - Harmful to aquatic life with long lasting effects.
Perchloric Acid Blank	No known significant effects or critical hazards.
Sodium Nitrite Reference Cell	H302 - Harmful if swallowed. H371 - May cause damage to organs. H410 - Very toxic to aquatic life with long lasting effects.
Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.

Precautionary statements

Prevention :

Hexane Blank	P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating or lighting equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P264 - Wash thoroughly after handling.
Water Blank	Not applicable.
Holmium Perchlorate Reference Cell	P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat. No smoking. P220 - Keep away from clothing and other combustible materials. P221 - Take any precaution to avoid mixing with combustibles. P260 - Do not breathe vapor.

Section 2. Hazards identification

	Hexane Reference Cell	P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P241 - Use explosion-proof electrical, ventilating or lighting equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P264 - Wash thoroughly after handling.
	Potassium Chloride Reference Cell	Not applicable.
	Sodium Iodide Reference Cell	P273 - Avoid release to the environment. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product.
	Potassium Dichromate Reference Cell - 60	Not applicable.
	Potassium Dichromate Reference Cell - 600	P273 - Avoid release to the environment.
	Perchloric Acid Blank	Not applicable.
	Sodium Nitrite Reference Cell	P273 - Avoid release to the environment. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash thoroughly after handling.
	Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
	Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.
Response :	Hexane Blank	P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
	Water Blank	Not applicable.
	Holmium Perchlorate Reference Cell	P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. P363 - Wash contaminated clothing before reuse.

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			P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
		Hexane Reference Cell	P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
		Potassium Chloride Reference Cell	Not applicable.
		Sodium Iodide Reference Cell	P314 - Get medical advice or attention if you feel unwell.
		Potassium Dichromate Reference Cell - 60	Not applicable.
		Potassium Dichromate Reference Cell - 600	P391 - Collect spillage.
		Perchloric Acid Blank	Not applicable.
		Sodium Nitrite Reference Cell	P391 - Collect spillage. P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
		Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
		Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.
Storage	:	Hexane Blank	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
		Water Blank	Not applicable.
		Holmium Perchlorate Reference Cell	Not applicable.
		Hexane Reference Cell	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
		Potassium Chloride Reference Cell	Not applicable.
		Sodium Iodide Reference Cell	Not applicable.
		Potassium Dichromate Reference Cell - 60	Not applicable.
		Potassium Dichromate Reference Cell - 600	Not applicable.
		Perchloric Acid Blank	Not applicable.
		Sodium Nitrite Reference Cell	Not applicable.
		Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
		Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.

Section 2. Hazards identification

Disposal	:	Hexane Blank	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Water Blank	Not applicable.
		Holmium Perchlorate Reference Cell	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Hexane Reference Cell	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Potassium Chloride Reference Cell	Not applicable.
		Sodium Iodide Reference Cell	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Potassium Dichromate Reference Cell - 60	Not applicable.
		Potassium Dichromate Reference Cell - 600	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Perchloric Acid Blank	Not applicable.
		Sodium Nitrite Reference Cell	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
		Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.
Supplemental label elements	:	Hexane Blank	None known.
		Water Blank	None known.
		Holmium Perchlorate Reference Cell	Keep container tightly closed. Do not breathe vapor or spray. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.
		Hexane Reference Cell	None known.
		Potassium Chloride Reference Cell	None known.
		Sodium Iodide Reference Cell	None known.
		Potassium Dichromate Reference Cell - 60	None known.
		Potassium Dichromate Reference Cell - 600	None known.
		Perchloric Acid Blank	None known.
		Sodium Nitrite Reference Cell	None known.
		Potassium Dichromate Reference Cell - 40 mg/L	None known.
		Potassium Dichromate Reference Cell - 120 mg/L	None known.

2.3 Other hazards

Hazards not otherwise classified	:	Hexane Blank	None known.
		Water Blank	None known.
		Holmium Perchlorate Reference Cell	Causes respiratory tract burns. Causes digestive tract burns.
		Hexane Reference Cell	None known.
		Potassium Chloride Reference Cell	None known.
		Sodium Iodide Reference Cell	None known.
		Potassium Dichromate Reference Cell - 60	None known.
		Potassium Dichromate Reference Cell - 600	None known.
		Perchloric Acid Blank	None known.

Section 2. Hazards identification

Sodium Nitrite Reference Cell	None known.
Potassium Dichromate Reference Cell - 40 mg/L	None known.
Potassium Dichromate Reference Cell - 120 mg/L	None known.

Section 3. Composition/information on ingredients

Substance/mixture :

Hexane Blank	Substance
Water Blank	Substance
Holmium Perchlorate Reference Cell	Mixture
Hexane Reference Cell	Mixture
Potassium Chloride Reference Cell	Mixture
Sodium Iodide Reference Cell	Mixture
Potassium Dichromate Reference Cell - 60	Mixture
Potassium Dichromate Reference Cell - 600	Mixture
Perchloric Acid Blank	Mixture
Sodium Nitrite Reference Cell	Mixture
Potassium Dichromate Reference Cell - 40 mg/L	Mixture
Potassium Dichromate Reference Cell - 120 mg/L	Mixture

Ingredient name	%	CAS number
Hexane Blank		
n-Hexane	100	110-54-3
Water Blank		
water	100	7732-18-5
Holmium Perchlorate Reference Cell		
Perchloric acid	≥10 - <22	7601-90-3
Hexane Reference Cell		
n-Hexane	≥90	110-54-3
Potassium Chloride Reference Cell		
Potassium chloride	≤3	7447-40-7
Sodium Iodide Reference Cell		
Sodium iodide	<2.5	7681-82-5
Potassium Dichromate Reference Cell - 60		
Potassium dichromate	<0.01	7778-50-9

Section 3. Composition/information on ingredients

Potassium Dichromate Reference Cell - 600		
Potassium dichromate	<0.1	7778-50-9
Sodium Nitrite Reference Cell		
Sodium nitrite	<10	7632-00-0
Potassium Dichromate Reference Cell - 40 mg/L		
Potassium dichromate	<0.01	7778-50-9
Potassium Dichromate Reference Cell - 120 mg/L		
Potassium dichromate	<0.025	7778-50-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact :

Hexane Blank	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Water Blank	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Holmium Perchlorate Reference Cell	Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Hexane Reference Cell	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Potassium Chloride Reference Cell	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Sodium Iodide Reference Cell	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
Potassium Dichromate Reference Cell - 60	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Section 4. First aid measures

			Check for and remove any contact lenses. Get medical attention if irritation occurs.
		Potassium Dichromate Reference Cell - 600	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		Perchloric Acid Blank	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		Sodium Nitrite Reference Cell	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician.
		Potassium Dichromate Reference Cell - 40 mg/L	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		Potassium Dichromate Reference Cell - 120 mg/L	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	:	Hexane Blank	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		Water Blank	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Holmium Perchlorate Reference Cell	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		Hexane Reference Cell	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is

Section 4. First aid measures

	suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Potassium Chloride Reference Cell	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Sodium Iodide Reference Cell	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Potassium Dichromate Reference Cell - 60	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Potassium Dichromate Reference Cell - 600	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Perchloric Acid Blank	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Sodium Nitrite Reference Cell	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Potassium Dichromate Reference Cell - 40 mg/L	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Potassium Dichromate Reference Cell - 120 mg/L	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

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Skin contact :	Hexane Blank	Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Water Blank	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Holmium Perchlorate Reference Cell	Get medical attention immediately. Call a poison center or physician. Rinse immediately contaminated clothing and skin with plenty of water. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Hexane Reference Cell	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Potassium Chloride Reference Cell	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Sodium Iodide Reference Cell	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Potassium Dichromate Reference Cell - 60	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Potassium Dichromate Reference Cell - 600	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Perchloric Acid Blank	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Sodium Nitrite Reference Cell	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Potassium Dichromate Reference Cell - 40 mg/L	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Potassium Dichromate Reference Cell - 120 mg/L	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Section 4. First aid measures

Ingestion	:	Hexane Blank	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		Water Blank	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		Holmium Perchlorate Reference Cell	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		Hexane Reference Cell	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		Potassium Chloride Reference Cell	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		Sodium Iodide Reference Cell	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities

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	of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Potassium Dichromate Reference Cell - 60	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Potassium Dichromate Reference Cell - 600	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.
Perchloric Acid Blank	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Sodium Nitrite Reference Cell	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Potassium Dichromate Reference Cell - 40 mg/L	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Potassium Dichromate Reference Cell - 120 mg/L	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

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Eye contact	: Hexane Blank	Causes eye irritation.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	Causes serious eye damage.
	Hexane Reference Cell	Causes eye irritation.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.
Inhalation	: Hexane Blank	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	Corrosive to the respiratory system.
	Hexane Reference Cell	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	May cause damage to organs following a single exposure if inhaled.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.
Skin contact	: Hexane Blank	Causes skin irritation.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	Causes severe burns.
	Hexane Reference Cell	Causes skin irritation.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	May cause damage to organs following a single exposure in contact with skin.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.

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Ingestion	:	Hexane Blank	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
		Water Blank	No known significant effects or critical hazards.
		Holmium Perchlorate Reference Cell	May cause burns to mouth, throat and stomach. Corrosive to the digestive tract. Causes burns.
		Hexane Reference Cell	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
		Potassium Chloride Reference Cell	No known significant effects or critical hazards.
		Sodium Iodide Reference Cell	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
		Perchloric Acid Blank	No known significant effects or critical hazards.
		Sodium Nitrite Reference Cell	Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.
		Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	Hexane Blank	Adverse symptoms may include the following: pain or irritation watering redness
		Water Blank	No specific data.
		Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: pain watering redness
		Hexane Reference Cell	Adverse symptoms may include the following: pain or irritation watering redness
		Potassium Chloride Reference Cell	No specific data.
		Sodium Iodide Reference Cell	No specific data.
		Potassium Dichromate Reference Cell - 60	No specific data.
		Potassium Dichromate Reference Cell - 600	No specific data.
		Perchloric Acid Blank	No specific data.
		Sodium Nitrite Reference Cell	No specific data.
		Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
		Potassium Dichromate Reference Cell - 120 mg/L	No specific data.
Inhalation	:	Hexane Blank	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

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	Water Blank	No specific data.
	Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: respiratory tract irritation coughing
	Hexane Reference Cell	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
	Potassium Chloride Reference Cell	No specific data.
	Sodium Iodide Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 60	No specific data.
	Potassium Dichromate Reference Cell - 600	No specific data.
	Perchloric Acid Blank	No specific data.
	Sodium Nitrite Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.
Skin contact :	Hexane Blank	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
	Water Blank	No specific data.
	Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Hexane Reference Cell	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
	Potassium Chloride Reference Cell	No specific data.
	Sodium Iodide Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 60	No specific data.
	Potassium Dichromate Reference Cell - 600	No specific data.
	Perchloric Acid Blank	No specific data.
	Sodium Nitrite Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.

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Ingestion	:	Hexane Blank	Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
		Water Blank	No specific data.
		Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: stomach pains
		Hexane Reference Cell	Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
		Potassium Chloride Reference Cell	No specific data.
		Sodium Iodide Reference Cell	No specific data.
		Potassium Dichromate Reference Cell - 60	No specific data.
		Potassium Dichromate Reference Cell - 600	No specific data.
		Perchloric Acid Blank	No specific data.
		Sodium Nitrite Reference Cell	No specific data.
		Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
		Potassium Dichromate Reference Cell - 120 mg/L	No specific data.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	Hexane Blank	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Water Blank	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Holmium Perchlorate Reference Cell	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Hexane Reference Cell	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Potassium Chloride Reference Cell	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Sodium Iodide Reference Cell	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Potassium Dichromate Reference Cell - 60	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Potassium Dichromate Reference Cell - 600	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Perchloric Acid Blank	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Sodium Nitrite Reference Cell	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		Potassium Dichromate Reference	Treat symptomatically. Contact poison treatment

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	Cell - 40 mg/L	specialist immediately if large quantities have been ingested or inhaled.
	Potassium Dichromate Reference Cell - 120 mg/L	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	Hexane Blank	No specific treatment.
	Water Blank	No specific treatment.
	Holmium Perchlorate Reference Cell	No specific treatment.
	Hexane Reference Cell	No specific treatment.
	Potassium Chloride Reference Cell	No specific treatment.
	Sodium Iodide Reference Cell	No specific treatment.
	Potassium Dichromate Reference Cell - 60	No specific treatment.
	Potassium Dichromate Reference Cell - 600	No specific treatment.
	Perchloric Acid Blank	No specific treatment.
	Sodium Nitrite Reference Cell	No specific treatment.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific treatment.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific treatment.
Protection of first-aiders :	Hexane Blank	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Water Blank	No action shall be taken involving any personal risk or without suitable training.
	Holmium Perchlorate Reference Cell	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	Hexane Reference Cell	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Potassium Chloride Reference Cell	No action shall be taken involving any personal risk or without suitable training.
	Sodium Iodide Reference Cell	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Potassium Dichromate Reference Cell - 60	No action shall be taken involving any personal risk or without suitable training.
	Potassium Dichromate Reference Cell - 600	No action shall be taken involving any personal risk or without suitable training.
	Perchloric Acid Blank	No action shall be taken involving any personal risk or without suitable training.
	Sodium Nitrite Reference Cell	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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Potassium Dichromate Reference Cell - 40 mg/L	No action shall be taken involving any personal risk or without suitable training.
Potassium Dichromate Reference Cell - 120 mg/L	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media :

Hexane Blank	Use dry chemical, CO_2, water spray (fog) or foam.
Water Blank	Use an extinguishing agent suitable for the surrounding fire.
Holmium Perchlorate Reference Cell	Use an extinguishing agent suitable for the surrounding fire.
Hexane Reference Cell	Use dry chemical, CO_2, water spray (fog) or foam.
Potassium Chloride Reference Cell	Use an extinguishing agent suitable for the surrounding fire.
Sodium Iodide Reference Cell	Use an extinguishing agent suitable for the surrounding fire.
Potassium Dichromate Reference Cell - 60	Use an extinguishing agent suitable for the surrounding fire.
Potassium Dichromate Reference Cell - 600	Use an extinguishing agent suitable for the surrounding fire.
Perchloric Acid Blank	Use an extinguishing agent suitable for the surrounding fire.
Sodium Nitrite Reference Cell	Use an extinguishing agent suitable for the surrounding fire.
Potassium Dichromate Reference Cell - 40 mg/L	Use an extinguishing agent suitable for the surrounding fire.
Potassium Dichromate Reference Cell - 120 mg/L	Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media :

Hexane Blank	Do not use water jet.
Water Blank	None known.
Holmium Perchlorate Reference Cell	None known.
Hexane Reference Cell	Do not use water jet.
Potassium Chloride Reference Cell	None known.
Sodium Iodide Reference Cell	None known.
Potassium Dichromate Reference Cell - 60	None known.
Potassium Dichromate Reference Cell - 600	None known.
Perchloric Acid Blank	None known.
Sodium Nitrite Reference Cell	None known.
Potassium Dichromate Reference Cell - 40 mg/L	None known.
Potassium Dichromate Reference Cell - 120 mg/L	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical :

Hexane Blank

Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and

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		flash back. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Water Blank	In a fire or if heated, a pressure increase will occur and the container may burst.
	Holmium Perchlorate Reference Cell	Oxidizing material. May intensify fire. In a fire or if heated, a pressure increase will occur and the container may burst.
	Hexane Reference Cell	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Potassium Chloride Reference Cell	In a fire or if heated, a pressure increase will occur and the container may burst.
	Sodium Iodide Reference Cell	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Potassium Dichromate Reference Cell - 60	In a fire or if heated, a pressure increase will occur and the container may burst.
	Potassium Dichromate Reference Cell - 600	In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Perchloric Acid Blank	In a fire or if heated, a pressure increase will occur and the container may burst.
	Sodium Nitrite Reference Cell	In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Potassium Dichromate Reference Cell - 40 mg/L	In a fire or if heated, a pressure increase will occur and the container may burst.
	Potassium Dichromate Reference Cell - 120 mg/L	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products :	Hexane Blank	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Water Blank	No specific data.
	Holmium Perchlorate Reference Cell	Decomposition products may include the following materials: halogenated compounds
	Hexane Reference Cell	Decomposition products may include the following materials:

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		carbon dioxide carbon monoxide
	Potassium Chloride Reference Cell	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
	Sodium Iodide Reference Cell	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
	Potassium Dichromate Reference Cell - 60	No specific data.
	Potassium Dichromate Reference Cell - 600	No specific data.
	Perchloric Acid Blank	No specific data.
	Sodium Nitrite Reference Cell	Decomposition products may include the following materials: nitrogen oxides metal oxide/oxides
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.

5.3 Advice for firefighters

Special protective actions for fire-fighters	:	Hexane Blank	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
		Water Blank	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
		Holmium Perchlorate Reference Cell	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
		Hexane Reference Cell	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
		Potassium Chloride Reference Cell	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
		Sodium Iodide Reference Cell	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
		Potassium Dichromate Reference Cell - 60	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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	Potassium Dichromate Reference Cell - 600	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Perchloric Acid Blank	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Sodium Nitrite Reference Cell	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Potassium Dichromate Reference Cell - 40 mg/L	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Potassium Dichromate Reference Cell - 120 mg/L	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters :	Hexane Blank	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Water Blank	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Holmium Perchlorate Reference Cell	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Hexane Reference Cell	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Potassium Chloride Reference Cell	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Sodium Iodide Reference Cell	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Potassium Dichromate Reference Cell - 60	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Potassium Dichromate Reference Cell - 600	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Perchloric Acid Blank	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Sodium Nitrite Reference Cell	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Potassium Dichromate Reference Cell - 40 mg/L	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Potassium Dichromate Reference Cell - 120 mg/L	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel :

Hexane Blank	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Water Blank	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Holmium Perchlorate Reference Cell	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Hexane Reference Cell	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Potassium Chloride Reference Cell	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Sodium Iodide Reference Cell	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate

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		ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Potassium Dichromate Reference Cell - 60	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
	Potassium Dichromate Reference Cell - 600	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
	Perchloric Acid Blank	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
	Sodium Nitrite Reference Cell	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Potassium Dichromate Reference Cell - 40 mg/L	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
	Potassium Dichromate Reference Cell - 120 mg/L	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders :	Hexane Blank	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Water Blank	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Holmium Perchlorate Reference Cell	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Hexane Reference Cell	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Potassium Chloride Reference Cell	If specialized clothing is required to deal with the spillage, take note of any information in Section 8

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		on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Sodium Iodide Reference Cell	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Potassium Dichromate Reference Cell - 60	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Potassium Dichromate Reference Cell - 600	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Perchloric Acid Blank	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Sodium Nitrite Reference Cell	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Potassium Dichromate Reference Cell - 40 mg/L	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Potassium Dichromate Reference Cell - 120 mg/L	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions :	Hexane Blank	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
	Water Blank	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Holmium Perchlorate Reference Cell	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Hexane Reference Cell	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
	Potassium Chloride Reference Cell	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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Sodium Iodide Reference Cell	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Potassium Dichromate Reference Cell - 60	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Potassium Dichromate Reference Cell - 600	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Perchloric Acid Blank	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Sodium Nitrite Reference Cell	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
Potassium Dichromate Reference Cell - 40 mg/L	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Potassium Dichromate Reference Cell - 120 mg/L	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	: Hexane Blank	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Water Blank	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Holmium Perchlorate Reference Cell	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. The spilled material may be neutralized

Section 6. Accidental release measures

	with sodium carbonate, sodium bicarbonate or sodium hydroxide. Do not absorb in sawdust or other combustible material. It may lead to a fire risk when it dries out. Dispose of via a licensed waste disposal contractor.
Hexane Reference Cell	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Potassium Chloride Reference Cell	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Sodium Iodide Reference Cell	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Potassium Dichromate Reference Cell - 60	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Potassium Dichromate Reference Cell - 600	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Perchloric Acid Blank	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Sodium Nitrite Reference Cell	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Potassium Dichromate Reference Cell - 40 mg/L	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Potassium Dichromate Reference Cell - 120 mg/L	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures	:	Hexane Blank	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
		Water Blank	Put on appropriate personal protective equipment (see Section 8).
		Holmium Perchlorate Reference Cell	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from clothing, incompatible materials and combustible materials. Keep away from alkalis. Keep away from heat. Empty containers retain product residue and can be hazardous. Do not reuse container.
		Hexane Reference Cell	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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	Potassium Chloride Reference Cell	Put on appropriate personal protective equipment (see Section 8).
	Sodium Iodide Reference Cell	Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	Potassium Dichromate Reference Cell - 60	Put on appropriate personal protective equipment (see Section 8).
	Potassium Dichromate Reference Cell - 600	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	Perchloric Acid Blank	Put on appropriate personal protective equipment (see Section 8).
	Sodium Nitrite Reference Cell	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	Potassium Dichromate Reference Cell - 40 mg/L	Put on appropriate personal protective equipment (see Section 8).
	Potassium Dichromate Reference Cell - 120 mg/L	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene :	Hexane Blank	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Water Blank	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Holmium Perchlorate Reference Cell	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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Hexane Reference Cell	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Potassium Chloride Reference Cell	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Sodium Iodide Reference Cell	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Potassium Dichromate Reference Cell - 60	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Potassium Dichromate Reference Cell - 600	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Perchloric Acid Blank	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Sodium Nitrite Reference Cell	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Potassium Dichromate Reference Cell - 40 mg/L	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Potassium Dichromate Reference Cell - 120 mg/L	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove

Section 7. Handling and storage

contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Hexane Blank	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Water Blank	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Holmium Perchlorate Reference Cell	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from alkalis. Separate from reducing agents and combustible materials. Store away from grease and oil. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Hexane Reference Cell	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Potassium Chloride Reference Cell	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from

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	incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Sodium Iodide Reference Cell	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Potassium Dichromate Reference Cell - 60	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Potassium Dichromate Reference Cell - 600	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Perchloric Acid Blank	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Sodium Nitrite Reference Cell	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store

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	in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Potassium Dichromate Reference Cell - 40 mg/L	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Potassium Dichromate Reference Cell - 120 mg/L	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations	: Hexane Blank	Industrial applications, Professional applications.
	Water Blank	Industrial applications, Professional applications.
	Holmium Perchlorate Reference Cell	Industrial applications, Professional applications.
	Hexane Reference Cell	Industrial applications, Professional applications.
	Potassium Chloride Reference Cell	Industrial applications, Professional applications.
	Sodium Iodide Reference Cell	Industrial applications, Professional applications.
	Potassium Dichromate Reference Cell - 60	Industrial applications, Professional applications.
	Potassium Dichromate Reference Cell - 600	Industrial applications, Professional applications.
	Perchloric Acid Blank	Industrial applications, Professional applications.
	Sodium Nitrite Reference Cell	Industrial applications, Professional applications.
	Potassium Dichromate Reference Cell - 40 mg/L	Industrial applications, Professional applications.
	Potassium Dichromate Reference Cell - 120 mg/L	Industrial applications, Professional applications.
Industrial sector specific solutions	: Hexane Blank	Not available.
	Water Blank	Not available.
	Holmium Perchlorate Reference Cell	Not available.
	Hexane Reference Cell	Not available.
	Potassium Chloride Reference Cell	Not available.
	Sodium Iodide Reference Cell	Not available.
	Potassium Dichromate Reference Cell - 60	Not available.
	Potassium Dichromate Reference Cell - 600	Not available.
	Perchloric Acid Blank	Not available.
	Sodium Nitrite Reference Cell	Not available.

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Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Hexane Blank n-Hexane	**ACGIH TLV (United States, 1/2022).** **Absorbed through skin.** TWA: 50 ppm 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 50 ppm 8 hours. TWA: 180 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020).** TWA: 50 ppm 10 hours. TWA: 180 mg/m³ 10 hours. **OSHA PEL (United States, 5/2018).** TWA: 500 ppm 8 hours. TWA: 1800 mg/m³ 8 hours. **CAL OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 180 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
Water Blank water	None.
Holmium Perchlorate Reference Cell Perchloric acid	None.
Hexane Reference Cell n-Hexane	**ACGIH TLV (United States, 1/2022).** **Absorbed through skin.** TWA: 50 ppm 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 50 ppm 8 hours. TWA: 180 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020).** TWA: 50 ppm 10 hours. TWA: 180 mg/m³ 10 hours. **OSHA PEL (United States, 5/2018).** TWA: 500 ppm 8 hours. TWA: 1800 mg/m³ 8 hours. **CAL OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 180 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
Potassium Chloride Reference Cell Potassium chloride	None.
Sodium Iodide Reference Cell Sodium iodide	**ACGIH TLV (United States, 1/2022).** **[Iodides]**

Section 8. Exposure controls/personal protection

	TWA: 0.01 ppm 8 hours. Form: Inhalable fraction and vapor
Potassium Dichromate Reference Cell - 60 Potassium dichromate	**NIOSH REL (United States, 10/2020). [chromic acid and chromates]** TWA: 0.0002 mg/m³ 8 hours. **ACGIH TLV (United States, 1/2022). [inorganic chromium VI compounds as Cr (VI)]** TWA: 0.0002 mg/m³, (measured as Cr) 8 hours. Form: Inhalable fraction STEL: 0.0005 mg/m³, (measured as Cr) 15 minutes. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Chromium (VI) compounds]** TWA: 0.005 mg/m³, (as Cr) 8 hours. **CAL OSHA PEL (United States, 5/2018). [chromium (vi) compounds as Cr]** C: 0.1 mg/m³, (as Cr) TWA: 0.005 mg/m³, (as Cr) 8 hours.
Potassium Dichromate Reference Cell - 600 Potassium dichromate	**NIOSH REL (United States, 10/2020). [chromic acid and chromates]** TWA: 0.0002 mg/m³ 8 hours. **ACGIH TLV (United States, 1/2022). [inorganic chromium VI compounds as Cr (VI)]** TWA: 0.0002 mg/m³, (measured as Cr) 8 hours. Form: Inhalable fraction STEL: 0.0005 mg/m³, (measured as Cr) 15 minutes. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Chromium (VI) compounds]** TWA: 0.005 mg/m³, (as Cr) 8 hours. **CAL OSHA PEL (United States, 5/2018). [chromium (vi) compounds as Cr]** C: 0.1 mg/m³, (as Cr) TWA: 0.005 mg/m³, (as Cr) 8 hours.
Sodium Nitrite Reference Cell Sodium nitrite	None.
Potassium Dichromate Reference Cell - 40 mg/L Potassium dichromate	**NIOSH REL (United States, 10/2020). [chromic acid and chromates]** TWA: 0.0002 mg/m³ 8 hours. **ACGIH TLV (United States, 1/2022). [inorganic chromium VI compounds as Cr (VI)]** TWA: 0.0002 mg/m³, (measured as Cr) 8 hours. Form: Inhalable fraction STEL: 0.0005 mg/m³, (measured as Cr) 15 minutes. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Chromium (VI) compounds]** TWA: 0.005 mg/m³, (as Cr) 8 hours.

Section 8. Exposure controls/personal protection

	CAL OSHA PEL (United States, 5/2018). [chromium (vi) compounds as Cr] C: 0.1 mg/m³, (as Cr) TWA: 0.005 mg/m³, (as Cr) 8 hours.
Potassium Dichromate Reference Cell - 120 mg/L Potassium dichromate	**NIOSH REL (United States, 10/2020). [chromic acid and chromates]** TWA: 0.0002 mg/m³ 8 hours. **ACGIH TLV (United States, 1/2022). [inorganic chromium VI compounds as Cr (VI)]** TWA: 0.0002 mg/m³, (measured as Cr) 8 hours. Form: Inhalable fraction STEL: 0.0005 mg/m³, (measured as Cr) 15 minutes. Form: Inhalable fraction **OSHA PEL (United States, 5/2018). [Chromium (VI) compounds]** TWA: 0.005 mg/m³, (as Cr) 8 hours. **CAL OSHA PEL (United States, 5/2018). [chromium (vi) compounds as Cr]** C: 0.1 mg/m³, (as Cr) TWA: 0.005 mg/m³, (as Cr) 8 hours.

Biological exposure indices

Ingredient name	Exposure indices
Hexane Blank	
n-Hexane	**ACGIH BEI (United States, 1/2022)** BEI: 0.5 mg/l, 2,5-hexanedion [in urine]. Sampling time: end of shift.
Hexane Reference Cell	
n-Hexane	**ACGIH BEI (United States, 1/2022)** BEI: 0.5 mg/l, 2,5-hexanedion [in urine]. Sampling time: end of shift.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state :

Hexane Blank	Liquid.
Water Blank	Liquid. [Clear.]
Holmium Perchlorate Reference Cell	Liquid.
Hexane Reference Cell	Liquid.
Potassium Chloride Reference Cell	Liquid.
Sodium Iodide Reference Cell	Liquid.
Potassium Dichromate Reference Cell - 60	Liquid.
Potassium Dichromate Reference Cell - 600	Liquid.
Perchloric Acid Blank	Liquid.
Sodium Nitrite Reference Cell	Liquid.
Potassium Dichromate Reference Cell - 40 mg/L	Liquid.
Potassium Dichromate Reference Cell - 120 mg/L	Liquid.

Color :

Hexane Blank	Colorless.
Water Blank	Colorless.
Holmium Perchlorate Reference Cell	Transparent
Hexane Reference Cell	Transparent
Potassium Chloride Reference Cell	Transparent
Sodium Iodide Reference Cell	Transparent
Potassium Dichromate Reference Cell - 60	Transparent
Potassium Dichromate Reference	Transparent

Section 9. Physical and chemical properties and safety characteristics

		Cell - 600	
		Perchloric Acid Blank	Transparent
		Sodium Nitrite Reference Cell	Not available.
		Potassium Dichromate Reference Cell - 40 mg/L	Not available.
		Potassium Dichromate Reference Cell - 120 mg/L	Not available.
Odor	:	Hexane Blank	Gasoline-like [Slight]
		Water Blank	Odorless.
		Holmium Perchlorate Reference Cell	Not available.
		Hexane Reference Cell	Not available.
		Potassium Chloride Reference Cell	Not available.
		Sodium Iodide Reference Cell	Not available.
		Potassium Dichromate Reference Cell - 60	Not available.
		Potassium Dichromate Reference Cell - 600	Not available.
		Perchloric Acid Blank	Not available.
		Sodium Nitrite Reference Cell	Not available.
		Potassium Dichromate Reference Cell - 40 mg/L	Not available.
		Potassium Dichromate Reference Cell - 120 mg/L	Not available.
Odor threshold	:	Hexane Blank	65 to 248 ppm
		Water Blank	Not available.
		Holmium Perchlorate Reference Cell	Not available.
		Hexane Reference Cell	Not available.
		Potassium Chloride Reference Cell	Not available.
		Sodium Iodide Reference Cell	Not available.
		Potassium Dichromate Reference Cell - 60	Not available.
		Potassium Dichromate Reference Cell - 600	Not available.
		Perchloric Acid Blank	Not available.
		Sodium Nitrite Reference Cell	Not available.
		Potassium Dichromate Reference Cell - 40 mg/L	Not available.
		Potassium Dichromate Reference Cell - 120 mg/L	Not available.
pH	:	Hexane Blank	Not available.
		Water Blank	7
		Holmium Perchlorate Reference Cell	<2
		Hexane Reference Cell	Not available.
		Potassium Chloride Reference Cell	Not available.
		Sodium Iodide Reference Cell	Not available.
		Potassium Dichromate Reference Cell - 60	Not available.
		Potassium Dichromate Reference Cell - 600	Not available.
		Perchloric Acid Blank	Not available.
		Sodium Nitrite Reference Cell	Not available.
		Potassium Dichromate Reference Cell - 40 mg/L	Not available.
		Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Section 9. Physical and chemical properties and safety characteristics

Melting point/freezing point :

Hexane Blank	-95.35°C (-139.6°F)
Water Blank	0°C (32°F)
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	-95°C (-139°F)
Potassium Chloride Reference Cell	0°C (32°F)
Sodium Iodide Reference Cell	0°C (32°F)
Potassium Dichromate Reference Cell - 60	0°C (32°F)
Potassium Dichromate Reference Cell - 600	0°C (32°F)
Perchloric Acid Blank	0°C (32°F)
Sodium Nitrite Reference Cell	0°C (32°F)
Potassium Dichromate Reference Cell - 40 mg/L	0°C (32°F)
Potassium Dichromate Reference Cell - 120 mg/L	0°C (32°F)

Boiling point, initial boiling point, and boiling range :

Hexane Blank	68.73°C (155.7°F)
Water Blank	100°C (212°F)
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	69°C (156.2°F)
Potassium Chloride Reference Cell	100°C (212°F)
Sodium Iodide Reference Cell	100°C (212°F)
Potassium Dichromate Reference Cell - 60	100°C (212°F)
Potassium Dichromate Reference Cell - 600	100°C (212°F)
Perchloric Acid Blank	100°C (212°F)
Sodium Nitrite Reference Cell	100°C (212°F)
Potassium Dichromate Reference Cell - 40 mg/L	100°C (212°F)
Potassium Dichromate Reference Cell - 120 mg/L	100°C (212°F)

Flash point :

Hexane Blank	Closed cup: -23°C (-9.4°F)
Water Blank	Not available.
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	Closed cup: -23°C (-9.4°F)
Potassium Chloride Reference Cell	Not available.
Sodium Iodide Reference Cell	Not available.
Potassium Dichromate Reference Cell - 60	Not available.
Potassium Dichromate Reference Cell - 600	Not available.
Perchloric Acid Blank	Not available.
Sodium Nitrite Reference Cell	Not available.
Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Evaporation rate :

Hexane Blank	6.82 (butyl acetate = 1)
Water Blank	Not available.
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	9 (butyl acetate = 1)
Potassium Chloride Reference Cell	Not available.
Sodium Iodide Reference Cell	Not available.
Potassium Dichromate Reference Cell - 60	Not available.

Section 9. Physical and chemical properties and safety characteristics

	Potassium Dichromate Reference Cell - 600	Not available.
	Perchloric Acid Blank	Not available.
	Sodium Nitrite Reference Cell	Not available.
	Potassium Dichromate Reference Cell - 40 mg/L	Not available.
	Potassium Dichromate Reference Cell - 120 mg/L	Not available.
Flammability :	Hexane Blank	Not applicable.
	Water Blank	Not applicable.
	Holmium Perchlorate Reference Cell	Not applicable.
	Hexane Reference Cell	Not applicable.
	Potassium Chloride Reference Cell	Not applicable.
	Sodium Iodide Reference Cell	Not applicable.
	Potassium Dichromate Reference Cell - 60	Not applicable.
	Potassium Dichromate Reference Cell - 600	Not applicable.
	Perchloric Acid Blank	Not applicable.
	Sodium Nitrite Reference Cell	Not applicable.
	Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
	Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.
Lower and upper explosion limit/flammability limit :	Hexane Blank	Lower: 1.2% Upper: 7.7%
	Water Blank	Not available.
	Holmium Perchlorate Reference Cell	Not available.
	Hexane Reference Cell	Lower: 1.2% Upper: 7.7%
	Potassium Chloride Reference Cell	Not available.
	Sodium Iodide Reference Cell	Not available.
	Potassium Dichromate Reference Cell - 60	Not available.
	Potassium Dichromate Reference Cell - 600	Not available.
	Perchloric Acid Blank	Not available.
	Sodium Nitrite Reference Cell	Not available.
	Potassium Dichromate Reference Cell - 40 mg/L	Not available.
	Potassium Dichromate Reference Cell - 120 mg/L	Not available.
Vapor pressure :	Hexane Blank	17 kPa (127.51 mm Hg) [room temperature] 53.4 kPa (400.69 mm Hg) [50°C (122°F)]
	Water Blank	2337.8 kPa (17535 mm Hg) [room temperature] 12.3 kPa (92.258 mm Hg) [50°C (122°F)]

Ingredient name	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Holmium Perchlorate Reference Cell						
water	17.5	2.3	-	92.258	12.3	-
Perchloric acid	0.53	0.071	-	-	-	-

Section 9. Physical and chemical properties and safety characteristics

Hexane Reference Cell						
n-Hexane	127.51	17	-	400.69	53.4	-
Potassium Chloride Reference Cell						
water	17.5	2.3	-	92.258	12.3	-
Sodium Iodide Reference Cell						
water	17.5	2.3	-	92.258	12.3	-
Potassium Dichromate Reference Cell - 60						
water	17.5	2.3	-	92.258	12.3	-
Potassium Dichromate Reference Cell - 600						
water	17.5	2.3	-	92.258	12.3	-
Perchloric Acid Blank						
water	17.5	2.3	-	92.258	12.3	-
Sodium Nitrite Reference Cell						
water	17.5	2.3	-	92.258	12.3	-
Potassium Dichromate Reference Cell - 40 mg/L						
water	17.5	2.3	-	92.258	12.3	-
Potassium Dichromate Reference Cell - 120 mg/L						
water	17.5	2.3	-	92.258	12.3	-

Section 9. Physical and chemical properties and safety characteristics

Relative vapor density :

Hexane Blank	3 [Air = 1]
Water Blank	0.62 [Air = 1]
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	3 [Air = 1]
Potassium Chloride Reference Cell	Not available.
Sodium Iodide Reference Cell	Not available.
Potassium Dichromate Reference Cell - 60	Not available.
Potassium Dichromate Reference Cell - 600	Not available.
Perchloric Acid Blank	Not available.
Sodium Nitrite Reference Cell	Not available.
Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Relative density :

Hexane Blank	0.7
Water Blank	1
Holmium Perchlorate Reference Cell	1
Hexane Reference Cell	0.66
Potassium Chloride Reference Cell	1
Sodium Iodide Reference Cell	1
Potassium Dichromate Reference Cell - 60	Not available.
Potassium Dichromate Reference Cell - 600	Not available.
Perchloric Acid Blank	Not available.
Sodium Nitrite Reference Cell	1
Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Solubility(ies) :

Media	Result
Hexane Blank	
methanol	Soluble
diethyl ether	Soluble
acetone	Soluble
water	Insoluble
Water Blank	
water	Soluble
Holmium Perchlorate Reference Cell	
water	Soluble
Hexane Reference Cell	
water	Insoluble
Potassium Chloride Reference Cell	
water	Soluble
Sodium Iodide Reference Cell	
water	Soluble
Potassium Dichromate Reference Cell - 60	
water	Soluble
Potassium Dichromate Reference Cell - 600	
water	Soluble
Perchloric Acid Blank	
water	Soluble
Sodium Nitrite Reference Cell	

Section 9. Physical and chemical properties and safety characteristics

water	Soluble
Potassium Dichromate Reference Cell - 40 mg/L	
water	Soluble
Potassium Dichromate Reference Cell - 120 mg/L	
water	Soluble

Partition coefficient: n-octanol/water :

Hexane Blank	4 [OECD 107]
Water Blank	-1.38
Holmium Perchlorate Reference Cell	Not applicable.
Hexane Reference Cell	Not applicable.
Potassium Chloride Reference Cell	Not applicable.
Sodium Iodide Reference Cell	Not applicable.
Potassium Dichromate Reference Cell - 60	Not applicable.
Potassium Dichromate Reference Cell - 600	Not applicable.
Perchloric Acid Blank	Not applicable.
Sodium Nitrite Reference Cell	Not applicable.
Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.

Auto-ignition temperature :

Hexane Blank	225°C (437°F)
Water Blank	Not applicable.

Ingredient name	°C	°F	Method
Hexane Reference Cell			
n-Hexane	225	437	-

Decomposition temperature :

Hexane Blank	Not available.
Water Blank	>1200°C (>2192°F)
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	Not available.
Potassium Chloride Reference Cell	Not available.
Sodium Iodide Reference Cell	Not available.
Potassium Dichromate Reference Cell - 60	Not available.
Potassium Dichromate Reference Cell - 600	Not available.
Perchloric Acid Blank	Not available.
Sodium Nitrite Reference Cell	Not available.
Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Viscosity :

Hexane Blank	Dynamic: 0.3 mPa·s (0.3 cP)
Water Blank	Not available.
Holmium Perchlorate Reference Cell	Not available.
Hexane Reference Cell	Not available.
Potassium Chloride Reference Cell	Not available.
Sodium Iodide Reference Cell	Not available.
Potassium Dichromate Reference Cell - 60	Not available.
Potassium Dichromate Reference Cell - 600	Not available.

Section 9. Physical and chemical properties and safety characteristics

Perchloric Acid Blank	Not available.
Sodium Nitrite Reference Cell	Not available.
Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Particle characteristics

Median particle size :

Hexane Blank	Not applicable.
Water Blank	Not applicable.
Holmium Perchlorate Reference Cell	Not applicable.
Hexane Reference Cell	Not applicable.
Potassium Chloride Reference Cell	Not applicable.
Sodium Iodide Reference Cell	Not applicable.
Potassium Dichromate Reference Cell - 60	Not applicable.
Potassium Dichromate Reference Cell - 600	Not applicable.
Perchloric Acid Blank	Not applicable.
Sodium Nitrite Reference Cell	Not applicable.
Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.

Section 10. Stability and reactivity

10.1 Reactivity :

Hexane Blank	No specific test data related to reactivity available for this product or its ingredients.
Water Blank	No specific test data related to reactivity available for this product or its ingredients.
Holmium Perchlorate Reference Cell	No specific test data related to reactivity available for this product or its ingredients.
Hexane Reference Cell	No specific test data related to reactivity available for this product or its ingredients.
Potassium Chloride Reference Cell	No specific test data related to reactivity available for this product or its ingredients.
Sodium Iodide Reference Cell	No specific test data related to reactivity available for this product or its ingredients.
Potassium Dichromate Reference Cell - 60	No specific test data related to reactivity available for this product or its ingredients.
Potassium Dichromate Reference Cell - 600	No specific test data related to reactivity available for this product or its ingredients.
Perchloric Acid Blank	No specific test data related to reactivity available for this product or its ingredients.
Sodium Nitrite Reference Cell	No specific test data related to reactivity available for this product or its ingredients.
Potassium Dichromate Reference Cell - 40 mg/L	No specific test data related to reactivity available for this product or its ingredients.
Potassium Dichromate Reference Cell - 120 mg/L	No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability :

Hexane Blank	The product is stable.
Water Blank	The product is stable.
Holmium Perchlorate Reference Cell	The product is stable.
Hexane Reference Cell	The product is stable.
Potassium Chloride Reference Cell	The product is stable.
Sodium Iodide Reference Cell	The product is stable.
Potassium Dichromate Reference	The product is stable.

Section 10. Stability and reactivity

	Cell - 60	
	Potassium Dichromate Reference Cell - 600	The product is stable.
	Perchloric Acid Blank	The product is stable.
	Sodium Nitrite Reference Cell	The product is stable.
	Potassium Dichromate Reference Cell - 40 mg/L	The product is stable.
	Potassium Dichromate Reference Cell - 120 mg/L	The product is stable.

10.3 Possibility of hazardous reactions :

Hexane Blank	Under normal conditions of storage and use, hazardous reactions will not occur.
Water Blank	Under normal conditions of storage and use, hazardous reactions will not occur.
Holmium Perchlorate Reference Cell	Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: contact with combustible materials Reactions may include the following: risk of causing or intensifying fire
Hexane Reference Cell	Under normal conditions of storage and use, hazardous reactions will not occur.
Potassium Chloride Reference Cell	Under normal conditions of storage and use, hazardous reactions will not occur.
Sodium Iodide Reference Cell	Under normal conditions of storage and use, hazardous reactions will not occur.
Potassium Dichromate Reference Cell - 60	Under normal conditions of storage and use, hazardous reactions will not occur.
Potassium Dichromate Reference Cell - 600	Under normal conditions of storage and use, hazardous reactions will not occur.
Perchloric Acid Blank	Under normal conditions of storage and use, hazardous reactions will not occur.
Sodium Nitrite Reference Cell	Under normal conditions of storage and use, hazardous reactions will not occur.
Potassium Dichromate Reference Cell - 40 mg/L	Under normal conditions of storage and use, hazardous reactions will not occur.
Potassium Dichromate Reference Cell - 120 mg/L	Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid :

Hexane Blank	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Water Blank	No specific data.
Holmium Perchlorate Reference Cell	Drying on clothing or other combustible materials may cause fire.
Hexane Reference Cell	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Potassium Chloride Reference Cell	No specific data.
Sodium Iodide Reference Cell	No specific data.
Potassium Dichromate Reference Cell - 60	No specific data.
Potassium Dichromate Reference Cell - 600	No specific data.
Perchloric Acid Blank	No specific data.

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	Sodium Nitrite Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.
10.5 Incompatible materials :	Hexane Blank	Reactive or incompatible with the following materials: oxidizing materials
	Water Blank	May react or be incompatible with oxidizing materials.
	Holmium Perchlorate Reference Cell	Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Reactive or incompatible with the following materials: alkalis combustible materials reducing materials
	Hexane Reference Cell	Reactive or incompatible with the following materials: oxidizing materials
	Potassium Chloride Reference Cell	May react or be incompatible with oxidizing materials.
	Sodium Iodide Reference Cell	May react or be incompatible with oxidizing materials.
	Potassium Dichromate Reference Cell - 60	May react or be incompatible with oxidizing materials.
	Potassium Dichromate Reference Cell - 600	May react or be incompatible with oxidizing materials.
	Perchloric Acid Blank	May react or be incompatible with oxidizing materials.
	Sodium Nitrite Reference Cell	May react or be incompatible with oxidizing materials.
	Potassium Dichromate Reference Cell - 40 mg/L	May react or be incompatible with oxidizing materials.
	Potassium Dichromate Reference Cell - 120 mg/L	May react or be incompatible with oxidizing materials.
10.6 Hazardous decomposition products :	Hexane Blank	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Water Blank	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Holmium Perchlorate Reference Cell	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Hexane Reference Cell	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Potassium Chloride Reference Cell	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Sodium Iodide Reference Cell	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Potassium Dichromate Reference Cell - 60	Under normal conditions of storage and use, hazardous decomposition products should not be

Section 10. Stability and reactivity

	produced.
Potassium Dichromate Reference Cell - 600	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Perchloric Acid Blank	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Sodium Nitrite Reference Cell	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Potassium Dichromate Reference Cell - 40 mg/L	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Potassium Dichromate Reference Cell - 120 mg/L	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hexane Blank				
n-Hexane	LC50 Inhalation Vapor	Rat	169.2 mg/l	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
Holmium Perchlorate Reference Cell				
Perchloric acid	LD50 Oral	Rat	1100 mg/kg	-
Hexane Reference Cell				
n-Hexane	LC50 Inhalation Vapor	Rat	169.2 mg/l	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
Potassium Chloride Reference Cell				
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
Sodium Iodide Reference Cell				
Sodium iodide	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	4340 mg/kg	-
Potassium Dichromate Reference Cell - 60				
Potassium dichromate	LD50 Dermal	Rabbit	14 mg/kg	-
	LD50 Oral	Rat	25 mg/kg	-
Potassium Dichromate Reference Cell - 600				
Potassium dichromate	LD50 Dermal	Rabbit	14 mg/kg	-
	LD50 Oral	Rat	25 mg/kg	-
Sodium Nitrite Reference Cell				
Sodium nitrite	LC50 Inhalation Dusts and mists	Rat	5.5 mg/l	4 hours
Potassium Dichromate				

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Reference Cell - 40 mg/L				
Potassium dichromate	LD50 Dermal	Rabbit	14 mg/kg	-
	LD50 Oral	Rat	25 mg/kg	-
Potassium Dichromate Reference Cell - 120 mg/L				
Potassium dichromate	LD50 Dermal	Rabbit	14 mg/kg	-
	LD50 Oral	Rat	25 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hexane Blank					
n-Hexane	Eyes - Mild irritant	Rabbit	-	10 mg	-
Hexane Reference Cell					
n-Hexane	Eyes - Mild irritant	Rabbit	-	10 mg	-
Potassium Chloride Reference Cell					
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Sodium Iodide Reference Cell					
Sodium iodide	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Potassium Dichromate Reference Cell - 60					
Potassium dichromate	Eyes - Severe irritant	Rabbit	-	140 mg	-
Potassium Dichromate Reference Cell - 600					
Potassium dichromate	Eyes - Severe irritant	Rabbit	-	140 mg	-
Sodium Nitrite Reference Cell					
Sodium nitrite	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Potassium Dichromate Reference Cell - 40 mg/L					
Potassium dichromate	Eyes - Severe irritant	Rabbit	-	140 mg	-
Potassium Dichromate Reference Cell - 120 mg/L					
Potassium dichromate	Eyes - Severe irritant	Rabbit	-	140 mg	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Potassium Dichromate Reference Cell - 60			
Potassium dichromate	+	1	Known to be a human carcinogen.
Potassium Dichromate Reference Cell - 600			
Potassium dichromate	+	1	Known to be a human carcinogen.
Potassium Dichromate Reference Cell - 40 mg/L			
Potassium dichromate	+	1	Known to be a human carcinogen.
Potassium Dichromate Reference Cell - 120 mg/L			
Potassium dichromate	+	1	Known to be a human carcinogen.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Hexane Blank			
n-Hexane	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Hexane Reference Cell			
n-Hexane	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Sodium Iodide Reference Cell			
Sodium iodide	Category 3	-	Respiratory tract irritation
Sodium Nitrite Reference Cell			
Sodium nitrite	Category 2	-	blood system

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Hexane Blank			
n-Hexane	Category 2	inhalation	nervous system
Holmium Perchlorate Reference Cell			
Perchloric acid	Category 2	-	thyroid
Hexane Reference Cell			
n-Hexane	Category 2	inhalation	nervous system
Sodium Iodide Reference Cell			
Sodium iodide	Category 1	oral	thyroid
Potassium Dichromate Reference Cell - 60			

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Potassium dichromate	Category 1	-	cardiovascular system, haematopoietic system
Potassium Dichromate Reference Cell - 600			
Potassium dichromate	Category 1	-	cardiovascular system, haematopoietic system
Potassium Dichromate Reference Cell - 40 mg/L			
Potassium dichromate	Category 1	-	cardiovascular system, haematopoietic system
Potassium Dichromate Reference Cell - 120 mg/L			
Potassium dichromate	Category 1	-	cardiovascular system, haematopoietic system

Aspiration hazard

Name	Result
Hexane Blank	
n-Hexane	ASPIRATION HAZARD - Category 1
Hexane Reference Cell	
Hexane Reference Cell	ASPIRATION HAZARD - Category 1
n-Hexane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure :

Hexane Blank	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Water Blank	Not available.
Holmium Perchlorate Reference Cell	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Hexane Reference Cell	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Potassium Chloride Reference Cell	Not available.
Sodium Iodide Reference Cell	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Potassium Dichromate Reference Cell - 60	Not available.
Potassium Dichromate Reference Cell - 600	Not available.
Perchloric Acid Blank	Not available.
Sodium Nitrite Reference Cell	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Potassium Dichromate Reference Cell - 40 mg/L	Not available.
Potassium Dichromate Reference Cell - 120 mg/L	Not available.

Potential acute health effects

Section 11. Toxicological information

Eye contact	: Hexane Blank	Causes eye irritation.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	Causes serious eye damage.
	Hexane Reference Cell	Causes eye irritation.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.
Inhalation	: Hexane Blank	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	Corrosive to the respiratory system.
	Hexane Reference Cell	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	May cause damage to organs following a single exposure if inhaled.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.
Skin contact	: Hexane Blank	Causes skin irritation.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	Causes severe burns.
	Hexane Reference Cell	Causes skin irritation.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	May cause damage to organs following a single exposure in contact with skin.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.

Section 11. Toxicological information

Ingestion :	Hexane Blank	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	May cause burns to mouth, throat and stomach. Corrosive to the digestive tract. Causes burns.
	Hexane Reference Cell	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact :	Hexane Blank	Adverse symptoms may include the following: pain or irritation watering redness
	Water Blank	No specific data.
	Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: pain watering redness
	Hexane Reference Cell	Adverse symptoms may include the following: pain or irritation watering redness
	Potassium Chloride Reference Cell	No specific data.
	Sodium Iodide Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 60	No specific data.
	Potassium Dichromate Reference Cell - 600	No specific data.
	Perchloric Acid Blank	No specific data.
	Sodium Nitrite Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.
Inhalation :	Hexane Blank	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths

Section 11. Toxicological information

		skeletal malformations
	Water Blank	No specific data.
	Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: respiratory tract irritation coughing
	Hexane Reference Cell	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
	Potassium Chloride Reference Cell	No specific data.
	Sodium Iodide Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 60	No specific data.
	Potassium Dichromate Reference Cell - 600	No specific data.
	Perchloric Acid Blank	No specific data.
	Sodium Nitrite Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.
Skin contact :	Hexane Blank	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
	Water Blank	No specific data.
	Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: pain or irritation redness blistering may occur
	Hexane Reference Cell	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
	Potassium Chloride Reference Cell	No specific data.
	Sodium Iodide Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 60	No specific data.
	Potassium Dichromate Reference Cell - 600	No specific data.
	Perchloric Acid Blank	No specific data.
	Sodium Nitrite Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.

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Ingestion :	Hexane Blank	Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
	Water Blank	No specific data.
	Holmium Perchlorate Reference Cell	Adverse symptoms may include the following: stomach pains
	Hexane Reference Cell	Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
	Potassium Chloride Reference Cell	No specific data.
	Sodium Iodide Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 60	No specific data.
	Potassium Dichromate Reference Cell - 600	No specific data.
	Perchloric Acid Blank	No specific data.
	Sodium Nitrite Reference Cell	No specific data.
	Potassium Dichromate Reference Cell - 40 mg/L	No specific data.
	Potassium Dichromate Reference Cell - 120 mg/L	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General :	Hexane Blank	May cause damage to organs through prolonged or repeated exposure if inhaled.
	Water Blank	No known significant effects or critical hazards.
	Holmium Perchlorate Reference Cell	May cause damage to organs through prolonged or repeated exposure.
	Hexane Reference Cell	May cause damage to organs through prolonged or repeated exposure.
	Potassium Chloride Reference Cell	No known significant effects or critical hazards.
	Sodium Iodide Reference Cell	Causes damage to organs through prolonged or repeated exposure.
	Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
	Perchloric Acid Blank	No known significant effects or critical hazards.
	Sodium Nitrite Reference Cell	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
	Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.

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Carcinogenicity	:	Hexane Blank	No known significant effects or critical hazards.
		Water Blank	No known significant effects or critical hazards.
		Holmium Perchlorate Reference Cell	No known significant effects or critical hazards.
		Hexane Reference Cell	No known significant effects or critical hazards.
		Potassium Chloride Reference Cell	No known significant effects or critical hazards.
		Sodium Iodide Reference Cell	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
		Perchloric Acid Blank	No known significant effects or critical hazards.
		Sodium Nitrite Reference Cell	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.
Mutagenicity	:	Hexane Blank	No known significant effects or critical hazards.
		Water Blank	No known significant effects or critical hazards.
		Holmium Perchlorate Reference Cell	No known significant effects or critical hazards.
		Hexane Reference Cell	No known significant effects or critical hazards.
		Potassium Chloride Reference Cell	No known significant effects or critical hazards.
		Sodium Iodide Reference Cell	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
		Perchloric Acid Blank	No known significant effects or critical hazards.
		Sodium Nitrite Reference Cell	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.
Reproductive toxicity	:	Hexane Blank	Suspected of damaging fertility or the unborn child.
		Water Blank	No known significant effects or critical hazards.
		Holmium Perchlorate Reference Cell	No known significant effects or critical hazards.
		Hexane Reference Cell	Suspected of damaging fertility or the unborn child.
		Potassium Chloride Reference Cell	No known significant effects or critical hazards.
		Sodium Iodide Reference Cell	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 60	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 600	No known significant effects or critical hazards.
		Perchloric Acid Blank	No known significant effects or critical hazards.
		Sodium Nitrite Reference Cell	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 40 mg/L	No known significant effects or critical hazards.
		Potassium Dichromate Reference Cell - 120 mg/L	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Hexane Blank					
n-Hexane	15840	N/A	N/A	169.2	N/A
Holmium Perchlorate Reference Cell					
Holmium Perchlorate Reference Cell	7281.0	N/A	N/A	N/A	N/A
Perchloric acid	1100	N/A	N/A	N/A	N/A
Hexane Reference Cell					
n-Hexane	15840	N/A	N/A	169.2	N/A
Potassium Chloride Reference Cell					
Potassium Chloride Reference Cell	216666.7	N/A	N/A	N/A	N/A
Potassium chloride	2600	N/A	N/A	N/A	N/A
Sodium Iodide Reference Cell					
Sodium Iodide Reference Cell	434000.0	250000	N/A	N/A	N/A
Sodium iodide	4340	2500	N/A	N/A	N/A
Potassium Dichromate Reference Cell - 60					
Potassium dichromate	25	14	N/A	N/A	0.0832
Potassium Dichromate Reference Cell - 600					
Potassium dichromate	25	14	N/A	N/A	0.0832
Sodium Nitrite Reference Cell					
Sodium Nitrite Reference Cell	1700.0	N/A	N/A	N/A	N/A
Sodium nitrite	85	N/A	N/A	N/A	5.5
Potassium Dichromate Reference Cell - 40 mg/L					
Potassium dichromate	25	14	N/A	N/A	0.0832
Potassium Dichromate Reference Cell - 120 mg/L					
Potassium dichromate	25	14	N/A	N/A	0.0832

Other information : Hexane Blank

Adverse symptoms may include the following:
Repeated exposure may cause skin dryness or cracking.

Hexane Reference Cell

Adverse symptoms may include the following:
Repeated exposure may cause skin dryness or cracking.

Section 12. Ecological information

12.1 Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Hexane Blank			
n-Hexane	Acute LC50 2500 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
Holmium Perchlorate Reference Cell			
Perchloric acid	Acute EC50 >100 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
Hexane Reference Cell			
n-Hexane	Acute LC50 2500 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
Potassium Chloride Reference Cell			
Potassium chloride	Acute EC50 9.24 g/L Fresh water	Algae - *Desmodesmus subspicatus*	72 hours
	Acute EC50 1337000 µg/l Fresh water	Algae - *Navicula seminulum*	96 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - *Pseudosida ramosa* - Neonate	48 hours
	Acute LC50 93000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 509.65 mg/l Fresh water	Fish - *Danio rerio*	96 hours
Sodium Iodide Reference Cell			
Sodium iodide	Acute LC50 0.17 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 860 mg/l Fresh water	Fish - *Oncorhynchus mykiss* - Fry	96 hours
Potassium Dichromate Reference Cell - 60			
Potassium dichromate	Acute EC50 0.51 µg/l Fresh water	Algae - *Stephanodiscus hantzschii* - Exponential growth phase	96 hours
	Acute EC50 29610 µg/l Fresh water	Aquatic plants - *Lemna minor* - Exponential growth phase	4 days
	Acute EC50 19.9 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute EC50 73 µg/l Fresh water	Fish - *Notemigonus crysoleucas*	96 hours
	Acute IC50 0.12 mg/l Fresh water	Algae - *Chlorella vulgaris*	72 hours
	Acute LC50 0.002 mg/l Fresh water	Crustaceans - *Ceriodaphnia rigaudi* - Neonate	48 hours
	Chronic NOEC 40 µg/l Marine water	Algae - *Gracilaria tenuistipitata*	4 days
	Chronic NOEC 0.01 ug/ml Fresh water	Aquatic plants - *Eichhornia crassipes* - Young	96 hours
	Chronic NOEC 0.018 mg/l Fresh water	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC 0.71 mg/l Fresh water	Fish - *Channa punctata* - Adult	30 days
Potassium Dichromate Reference Cell - 600			
Potassium dichromate	Acute EC50 0.51 µg/l Fresh water	Algae - *Stephanodiscus hantzschii* - Exponential growth phase	96 hours
	Acute EC50 29610 µg/l Fresh water	Aquatic plants - *Lemna minor* - Exponential growth phase	4 days
	Acute EC50 19.9 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute EC50 73 µg/l Fresh water	Fish - *Notemigonus crysoleucas*	96 hours
	Acute IC50 0.12 mg/l Fresh water	Algae - *Chlorella vulgaris*	72 hours
	Acute LC50 0.002 mg/l Fresh water	Crustaceans - *Ceriodaphnia rigaudi* - Neonate	48 hours
	Chronic NOEC 40 µg/l Marine water	Algae - *Gracilaria tenuistipitata*	4 days
	Chronic NOEC 0.01 ug/ml Fresh water	Aquatic plants - *Eichhornia crassipes* - Young	96 hours

Section 12. Ecological information

	Chronic NOEC 0.018 mg/l Fresh water	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC 0.71 mg/l Fresh water	Fish - *Channa punctata* - Adult	30 days
Sodium Nitrite Reference Cell			
Sodium nitrite	Acute EC50 159000 µg/l Marine water	Algae - *Tetraselmis chuii*	72 hours
	Acute EC50 1600000 µg/l Marine water	Algae - *Tetraselmis chuii*	96 hours
	Acute LC50 1100 µg/l Fresh water	Crustaceans - *Cherax quadricarinatus*	48 hours
	Acute LC50 18.75 mg/l Fresh water	Daphnia - *Daphnia similoides*	48 hours
	Acute LC50 0.16 µg/l Fresh water	Fish - *Ictalurus punctatus* - Fingerling	96 hours
	Chronic NOEC 0.1 mg/l	Daphnia - *Daphnia obtusa* - Neonate	21 days
	Chronic NOEC 0.01 mg/l Fresh water	Fish - *Oncorhynchus mykiss*	28 days
Potassium Dichromate Reference Cell - 40 mg/L			
Potassium dichromate	Acute EC50 0.51 µg/l Fresh water	Algae - *Stephanodiscus hantzschii* - Exponential growth phase	96 hours
	Acute EC50 29610 µg/l Fresh water	Aquatic plants - *Lemna minor* - Exponential growth phase	4 days
	Acute EC50 19.9 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute EC50 73 µg/l Fresh water	Fish - *Notemigonus crysoleucas*	96 hours
	Acute IC50 0.12 mg/l Fresh water	Algae - *Chlorella vulgaris*	72 hours
	Acute LC50 0.002 mg/l Fresh water	Crustaceans - *Ceriodaphnia rigaudi* - Neonate	48 hours
	Chronic NOEC 40 µg/l Marine water	Algae - *Gracilaria tenuistipitata*	4 days
	Chronic NOEC 0.01 ug/ml Fresh water	Aquatic plants - *Eichhornia crassipes* - Young	96 hours
	Chronic NOEC 0.018 mg/l Fresh water	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC 0.71 mg/l Fresh water	Fish - *Channa punctata* - Adult	30 days
Potassium Dichromate Reference Cell - 120 mg/L			
Potassium dichromate	Acute EC50 0.51 µg/l Fresh water	Algae - *Stephanodiscus hantzschii* - Exponential growth phase	96 hours
	Acute EC50 29610 µg/l Fresh water	Aquatic plants - *Lemna minor* - Exponential growth phase	4 days
	Acute EC50 19.9 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute EC50 73 µg/l Fresh water	Fish - *Notemigonus crysoleucas*	96 hours
	Acute IC50 0.12 mg/l Fresh water	Algae - *Chlorella vulgaris*	72 hours
	Acute LC50 0.002 mg/l Fresh water	Crustaceans - *Ceriodaphnia rigaudi* - Neonate	48 hours
	Chronic NOEC 40 µg/l Marine water	Algae - *Gracilaria tenuistipitata*	4 days
	Chronic NOEC 0.01 ug/ml Fresh water	Aquatic plants - *Eichhornia crassipes* - Young	96 hours
	Chronic NOEC 0.018 mg/l Fresh water	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC 0.71 mg/l Fresh water	Fish - *Channa punctata* - Adult	30 days

12.2 Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hexane Blank			
n-Hexane	-	-	Readily
Water Blank			
water	-	-	Readily
Hexane Reference Cell			
n-Hexane	-	-	Readily
Potassium Chloride Reference Cell			
Potassium chloride	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Hexane Blank			
n-Hexane	4	501.187	High
Water Blank			
water	-1.38	-	Low
Holmium Perchlorate Reference Cell			
Perchloric acid	-	0.039	Low
Hexane Reference Cell			
n-Hexane	4	501.187	High
Potassium Chloride Reference Cell			
Potassium chloride	-0.46	-	Low
Sodium Iodide Reference Cell			
Sodium iodide	0.05	1020	High
Sodium Nitrite Reference Cell			
Sodium nitrite	-3.7	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / IMDG / IATA : Not regulated.

Additional information

DOT Classification : **Reportable quantity** 24000 lbs / 10896 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations : **TSCA 5(a)2 final significant new use rules**: Sodium nitrite

TSCA 6 final risk management: Potassium dichromate

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 307: Potassium dichromate; Toluene

Clean Water Act (CWA) 311: Sodium nitrite; Potassium dichromate; Toluene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Section 15. Regulatory information

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification :

Hexane Blank	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
Water Blank	Not applicable.
Holmium Perchlorate Reference Cell	OXIDIZING LIQUIDS - Category 2 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1 HNOC - Corrosive to digestive tract HNOC - Corrosive to respiratory tract SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Hexane Reference Cell	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Potassium Chloride Reference Cell	Not applicable.
Sodium Iodide Reference Cell	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Potassium Dichromate Reference Cell - 60	Not applicable.
Potassium Dichromate Reference Cell - 600	Not applicable.
Perchloric Acid Blank	Not applicable.
Sodium Nitrite Reference Cell	ACUTE TOXICITY (oral) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2
Potassium Dichromate Reference Cell - 40 mg/L	Not applicable.
Potassium Dichromate Reference Cell - 120 mg/L	Not applicable.

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Classification
Hexane Blank		
n-Hexane	100	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
Holmium Perchlorate Reference Cell		
Perchloric acid	≥10 - <22	OXIDIZING LIQUIDS - Category 1 CORROSIVE TO METALS - Category 1 ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 HNOC - Corrosive to digestive tract HNOC - Corrosive to respiratory tract
Hexane Reference Cell		
n-Hexane	≥90	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Static-accumulating flammable liquid
Potassium Chloride Reference Cell		
Potassium chloride	≤3	EYE IRRITATION - Category 2B
Sodium Iodide Reference Cell		
Sodium iodide	<2.5	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Sodium Nitrite Reference Cell		
Sodium nitrite	<10	OXIDIZING SOLIDS - Category 3 ACUTE TOXICITY (oral) - Category 3 EYE IRRITATION - Category 2B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	**Hexane Blank** n-Hexane	110-54-3	100
	Hexane Reference Cell n-Hexane	110-54-3	≥90
	Sodium Nitrite Reference Cell Sodium nitrite	7632-00-0	<10

Section 15. Regulatory information

Supplier notification	**Hexane Blank** n-Hexane	110-54-3	100
	Hexane Reference Cell n-Hexane	110-54-3	≥90
	Sodium Nitrite Reference Cell Sodium nitrite	7632-00-0	<10

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: HEXANE; PERCHLORIC ACID

New York : The following components are listed: Hexane

New Jersey : The following components are listed: n-HEXANE; PERCHLORIC ACID

Pennsylvania : The following components are listed: HEXANE; PERCHLORIC ACID

California Prop. 65

⚠ **WARNING**: This product can expose you to chemicals including Chromium (hexavalent compounds), which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including n-hexane and Toluene, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Hexane Blank		
n-hexane	-	Yes.
Hexane Reference Cell		
n-hexane	-	Yes.
Toluene	-	Yes.
Potassium Dichromate Reference Cell - 60		
Chromium (hexavalent compounds)	Yes.	Yes.
Potassium Dichromate Reference Cell - 600		
Chromium (hexavalent compounds)	Yes.	Yes.
Potassium Dichromate Reference Cell - 40 mg/L		
Chromium (hexavalent compounds)	Yes.	Yes.
Potassium Dichromate Reference Cell - 120 mg/L		
Chromium (hexavalent compounds)	Yes.	Yes.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

Section 15. Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	:	All components are listed or exempted.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	All components are listed or exempted.
Japan	:	**Japan inventory (CSCL)**: All components are listed or exempted. **Japan inventory (ISHL)**: All components are listed or exempted.
New Zealand	:	All components are listed or exempted.
Philippines	:	Not determined.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	All components are listed or exempted.
Thailand	:	All components are listed or exempted.
Turkey	:	Not determined.
United States	:	All components are active or exempted.
Viet Nam	:	All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Hexane Blank	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN IRRITATION - Category 2	Expert judgment
EYE IRRITATION - Category 2B	On basis of test data
TOXIC TO REPRODUCTION - Category 2	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Expert judgment
ASPIRATION HAZARD - Category 1	Expert judgment
AQUATIC HAZARD (LONG-TERM) - Category 2	On basis of test data
Holmium Perchlorate Reference Cell	
OXIDIZING LIQUIDS - Category 2	Calculation method
SKIN CORROSION - Category 1	On basis of test data
SERIOUS EYE DAMAGE - Category 1	On basis of test data
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
Hexane Reference Cell	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2B	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Expert judgment
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method
Sodium Iodide Reference Cell	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

Section 16. Other information

AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method
Potassium Dichromate Reference Cell - 600	
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method
Sodium Nitrite Reference Cell	
ACUTE TOXICITY (oral) - Category 4	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method

History

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Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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