Conforms to US OSHA Hazard Communication 29CFR1910.1200

SAFETY DATA SHEET

Agilent Technologies

GC Checkout Standards Kit, Part Number 5188-5358

Section 1. Identification

1.1 Product identifier

Product name : GC Checkout Standards Kit, Part Number 5188-5358

Part no. (chemical kit) : 5188-5358

Part no. :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	5080-8842
Electron Capture Detector Sample	18713-60040-1
Nitrogen/Phosphorus Detector Sample	18789-60060-1
Flame Photometric Detector Checkout Sample (40)	5188-5953-1
Headspace OQ/PV Standard	5182-9733-1

Validation date : 8/25/2023

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

Identified uses : Reagents and Standards for Analytical Chemistry Laboratory Use

Flame Ionization Detector (FID) Sample-0.33% (w/w)	2 x 0.5 ml
Electron Capture Detector Sample	1 x 0.5 ml
Nitrogen/Phosphorus Detector Sample	1 x 0.5 ml
Flame Photometric Detector Checkout Sample (40)	1 x 1 ml
Headspace OQ/PV Standard	1 x 1 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 :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Electron Capture Detector Sample	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Nitrogen/Phosphorus Detector Sample	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Flame Photometric Detector Checkout Sample (40)	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Headspace OQ/PV Standard	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

Section 2. Hazards identification

Flame Ionization Detector (FID) Sample-0.33%(w/w)

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

Electron Capture Detector Sample

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN IRRITATION - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H400	AQUATIC HAZARD (ACUTE) - Category 1
H410	AQUATIC HAZARD (LONG-TERM) - Category 1

Nitrogen/Phosphorus Detector Sample

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN IRRITATION - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H400	AQUATIC HAZARD (ACUTE) - Category 1
H410	AQUATIC HAZARD (LONG-TERM) - Category 1

Flame Photometric Detector Checkout Sample (40)

H225	FLAMMABLE LIQUIDS - Category 2
H315	SKIN IRRITATION - Category 2
H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H304	ASPIRATION HAZARD - Category 1
H400	AQUATIC HAZARD (ACUTE) - Category 1
H410	AQUATIC HAZARD (LONG-TERM) - Category 1

Headspace OQ/PV Standard

H225	FLAMMABLE LIQUIDS - Category 2
H319	EYE IRRITATION - Category 2A
H351	CARCINOGENICITY - Category 2
H360	TOXIC TO REPRODUCTION - Category 1B
H412	AQUATIC HAZARD (LONG-TERM) - Category 3

2.2 GHS label elements

Section 2. Hazards identification

Hazard pictograms :

Flame Ionization Detector (FID) Sample-0.33%(w/w)

Electron Capture Detector Sample

Nitrogen/Phosphorus Detector Sample

Flame Photometric Detector Checkout Sample (40)

Headspace OQ/PV Standard

Signal word :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Danger
Electron Capture Detector Sample	Danger
Nitrogen/Phosphorus Detector Sample	Danger
Flame Photometric Detector Checkout Sample (40)	Danger
Headspace OQ/PV Standard	Danger

Hazard statements :

Flame Ionization Detector (FID) Sample-0.33%(w/w)

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.

Electron Capture Detector Sample

H225 - Highly flammable liquid and vapor.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H410 - Very toxic to aquatic life with long lasting effects.

Nitrogen/Phosphorus Detector Sample

H225 - Highly flammable liquid and vapor.

H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H410 - Very toxic to aquatic life with long lasting effects.

Section 2. Hazards identification

	Flame Photometric Detector Checkout Sample (40)	H225 - Highly flammable liquid and vapor. H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H336 - May cause drowsiness or dizziness. H410 - Very toxic to aquatic life with long lasting effects.
	Headspace OQ/PV Standard	H225 - Highly flammable liquid and vapor. H319 - Causes serious eye irritation. H351 - Suspected of causing cancer. H360 - May damage fertility or the unborn child. H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
	Electron Capture Detector Sample	P280 - Wear protective gloves. 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. P261 - Avoid breathing vapor. P264 - Wash thoroughly after handling.
	Nitrogen/Phosphorus Detector Sample	P280 - Wear protective gloves. 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. P261 - Avoid breathing vapor. P264 - Wash thoroughly after handling.
	Flame Photometric Detector Checkout Sample (40)	P280 - Wear protective gloves. 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.

Section 2. Hazards identification

			P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P273 - Avoid release to the environment. P261 - Avoid breathing vapor. P264 - Wash thoroughly after handling.
		Headspace OQ/PV Standard	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. P233 - Keep container tightly closed. P273 - Avoid release to the environment.
Response	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	P391 - Collect spillage. 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.
		Nitrogen/Phosphorus Detector Sample	P391 - Collect spillage. 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.
		Flame Photometric Detector Checkout Sample (40)	P391 - Collect spillage. P304 + P312 - IF INHALED: Call a POISON

Section 2. Hazards identification

			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.
		Headspace OQ/PV Standard	P308 + P313 - IF exposed or concerned: Get medical advice or attention. 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.
Storage	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
		Electron Capture Detector Sample	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
		Nitrogen/Phosphorus Detector Sample	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
		Flame Photometric Detector Checkout Sample (40)	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. P403 + P235 - Keep cool.
		Headspace OQ/PV Standard	P403 + P235 - Store in a well-ventilated place. Keep cool.
Disposal	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Electron Capture Detector Sample	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Nitrogen/Phosphorus Detector Sample	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Flame Photometric Detector Checkout Sample (40)	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		Headspace OQ/PV Standard	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	None known.
		Electron Capture Detector Sample	None known.
		Nitrogen/Phosphorus Detector Sample	None known.
		Flame Photometric Detector Checkout Sample (40)	None known.
		Headspace OQ/PV Standard	None known.

2.3 Other hazards

Section 2. Hazards identification

Hazards not otherwise classified :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	None known.
Electron Capture Detector Sample	None known.
Nitrogen/Phosphorus Detector Sample	None known.
Flame Photometric Detector Checkout Sample (40)	None known.
Headspace OQ/PV Standard	None known.

Section 3. Composition/information on ingredients

Substance/mixture :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Mixture
Electron Capture Detector Sample	Mixture
Nitrogen/Phosphorus Detector Sample	Mixture
Flame Photometric Detector Checkout Sample (40)	Mixture
Headspace OQ/PV Standard	Mixture

Ingredient name	%	CAS number
Flame Ionization Detector (FID) Sample-0.33%(w/w)		
n-Hexane	≥90	110-54-3
Electron Capture Detector Sample		
2,2,4-trimethylpentane	≥90	540-84-1
Nitrogen/Phosphorus Detector Sample		
2,2,4-trimethylpentane	≥90	540-84-1
Malathion (ISO)	<0.1	121-75-5
Flame Photometric Detector Checkout Sample (40)		
2,2,4-trimethylpentane	≥90	540-84-1
Parathion - methyl (ISO)	<0.001	298-00-0
Headspace OQ/PV Standard		
Ethanol	≥90	64-17-5
nitrobenzene	≤0.3	98-95-3
1,2-Dichlorobenzene	≤0.3	95-50-1

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	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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.
		Nitrogen/Phosphorus Detector Sample	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.
		Flame Photometric Detector Checkout Sample (40)	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.
		Headspace OQ/PV Standard	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.
Inhalation	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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.
		Nitrogen/Phosphorus Detector Sample	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

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			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.
		Flame Photometric Detector Checkout Sample (40)	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.
		Headspace OQ/PV Standard	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. 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.
Skin contact	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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.
		Nitrogen/Phosphorus Detector Sample	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.
		Flame Photometric Detector Checkout Sample (40)	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.
		Headspace OQ/PV Standard	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash

Section 4. First aid measures

			contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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.
		Nitrogen/Phosphorus Detector Sample	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.
		Flame Photometric Detector Checkout Sample (40)	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.

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		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.
	Headspace OQ/PV Standard	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. 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.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Causes eye irritation.
		Electron Capture Detector Sample	No known significant effects or critical hazards.
		Nitrogen/Phosphorus Detector Sample	No known significant effects or critical hazards.
		Flame Photometric Detector Checkout Sample (40)	No known significant effects or critical hazards.
		Headspace OQ/PV Standard	Causes serious eye irritation.
Inhalation	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
		Electron Capture Detector Sample	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
		Nitrogen/Phosphorus Detector Sample	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
		Flame Photometric Detector Checkout Sample (40)	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
		Headspace OQ/PV Standard	No known significant effects or critical hazards.
Skin contact	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Causes skin irritation.
		Electron Capture Detector Sample	Causes skin irritation.
		Nitrogen/Phosphorus Detector Sample	Causes skin irritation.
		Flame Photometric Detector Checkout Sample (40)	Causes skin irritation.
		Headspace OQ/PV Standard	No known significant effects or critical hazards.
Ingestion	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
		Electron Capture Detector Sample	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
		Nitrogen/Phosphorus Detector Sample	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
		Flame Photometric Detector Checkout Sample (40)	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters

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		airways.
	Headspace OQ/PV Standard	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: pain or irritation watering redness
	Electron Capture Detector Sample	Adverse symptoms may include the following: pain or irritation watering redness
	Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: pain or irritation watering redness
	Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: pain or irritation watering redness
	Headspace OQ/PV Standard	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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
	Electron Capture Detector Sample	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
	Headspace OQ/PV Standard	Adverse symptoms may include the following:

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			reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
		Electron Capture Detector Sample	Adverse symptoms may include the following: irritation redness
		Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: irritation redness
		Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: irritation redness
		Headspace OQ/PV Standard	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
		Electron Capture Detector Sample	Adverse symptoms may include the following: nausea or vomiting
		Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: nausea or vomiting
		Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: nausea or vomiting
		Headspace OQ/PV Standard	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Electron Capture Detector Sample	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Nitrogen/Phosphorus Detector Sample	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Flame Photometric Detector Checkout Sample (40)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Headspace OQ/PV Standard	Treat symptomatically. Contact poison treatment

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specialist immediately if large quantities have been ingested or inhaled.

Specific treatments :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	No specific treatment.
Electron Capture Detector Sample	No specific treatment.
Nitrogen/Phosphorus Detector Sample	No specific treatment.
Flame Photometric Detector Checkout Sample (40)	No specific treatment.
Headspace OQ/PV Standard	No specific treatment.

Protection of first-aiders :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
Electron Capture Detector Sample	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.
Nitrogen/Phosphorus Detector Sample	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.
Flame Photometric Detector Checkout Sample (40)	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.
Headspace OQ/PV Standard	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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Use dry chemical, CO_2, water spray (fog) or foam.
Electron Capture Detector Sample	Use dry chemical, CO_2, water spray (fog) or foam.
Nitrogen/Phosphorus Detector Sample	Use dry chemical, CO_2, water spray (fog) or foam.
Flame Photometric Detector Checkout Sample (40)	Use dry chemical, CO_2, water spray (fog) or foam.
Headspace OQ/PV Standard	Use dry chemical, CO_2, water spray (fog) or foam.

Section 5. Fire-fighting measures

Unsuitable extinguishing media	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Do not use water jet.
		Electron Capture Detector Sample	Do not use water jet.
		Nitrogen/Phosphorus Detector Sample	Do not use water jet.
		Flame Photometric Detector Checkout Sample (40)	Do not use water jet.
		Headspace OQ/PV Standard	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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 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.
		Nitrogen/Phosphorus Detector Sample	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. 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.
		Flame Photometric Detector Checkout Sample (40)	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 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.
		Headspace OQ/PV Standard	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if

Section 5. Fire-fighting measures

			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 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.
Hazardous thermal decomposition products	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Decomposition products may include the following materials: carbon dioxide carbon monoxide
		Electron Capture Detector Sample	Decomposition products may include the following materials: carbon dioxide carbon monoxide
		Nitrogen/Phosphorus Detector Sample	Decomposition products may include the following materials: carbon dioxide carbon monoxide
		Flame Photometric Detector Checkout Sample (40)	Decomposition products may include the following materials: carbon dioxide carbon monoxide
		Headspace OQ/PV Standard	Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special protective actions for fire-fighters	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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.
		Nitrogen/Phosphorus Detector Sample	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.
		Flame Photometric Detector Checkout Sample (40)	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.
		Headspace OQ/PV Standard	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No

Section 5. Fire-fighting measures

			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.
Special protective equipment for fire-fighters	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		Electron Capture Detector Sample	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		Nitrogen/Phosphorus Detector Sample	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		Flame Photometric Detector Checkout Sample (40)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		Headspace OQ/PV Standard	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	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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.
		Nitrogen/Phosphorus Detector Sample	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.
		Flame Photometric Detector Checkout Sample (40)	No action shall be taken involving any personal risk or without suitable training. Evacuate

Section 6. Accidental release measures

		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.
	Headspace OQ/PV Standard	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.
For emergency responders :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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".
	Electron Capture Detector Sample	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".
	Nitrogen/Phosphorus Detector Sample	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".
	Flame Photometric Detector Checkout Sample (40)	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".
	Headspace OQ/PV Standard	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 :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
	Electron Capture Detector Sample	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.
	Nitrogen/Phosphorus Detector Sample	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

Section 6. Accidental release measures

	large quantities. Collect spillage.
Flame Photometric Detector Checkout Sample (40)	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.
Headspace OQ/PV Standard	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.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
	Electron Capture Detector Sample	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.
	Nitrogen/Phosphorus Detector Sample	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.
	Flame Photometric Detector Checkout Sample (40)	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.
	Headspace OQ/PV Standard	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.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.
		Nitrogen/Phosphorus Detector Sample	Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.
		Flame Photometric Detector	Put on appropriate personal protective equipment

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	Checkout Sample (40)	(see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.
	Headspace OQ/PV Standard	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 ingest. Avoid breathing vapor or mist. 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.
Advice on general occupational hygiene :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
	Electron Capture Detector Sample	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.
	Nitrogen/Phosphorus Detector Sample	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.
	Flame Photometric Detector	Eating, drinking and smoking should be prohibited

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	Checkout Sample (40)	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.
	Headspace OQ/PV Standard	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.
7.2 Conditions for safe storage, including any incompatibilities :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
	Electron Capture Detector Sample	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.
	Nitrogen/Phosphorus Detector Sample	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.
	Flame Photometric Detector Checkout Sample (40)	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

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Headspace OQ/PV Standard	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. 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.

7.3 Specific end use(s)

Recommendations	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Industrial applications, Professional applications.
		Electron Capture Detector Sample	Industrial applications, Professional applications.
		Nitrogen/Phosphorus Detector Sample	Industrial applications, Professional applications.
		Flame Photometric Detector Checkout Sample (40)	Industrial applications, Professional applications.
		Headspace OQ/PV Standard	Industrial applications, Professional applications.
Industrial sector specific solutions	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not available.
		Electron Capture Detector Sample	Not available.
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	Not available.
		Headspace OQ/PV Standard	Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Flame Ionization Detector (FID) Sample-0.33%(w/w) 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.

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	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.
Electron Capture Detector Sample	
2,2,4-trimethylpentane	**ACGIH TLV (United States, 1/2022). [Octane all isomers]** TWA: 300 ppm 8 hours.
Nitrogen/Phosphorus Detector Sample	
2,2,4-trimethylpentane	**ACGIH TLV (United States, 1/2022). [Octane all isomers]** TWA: 300 ppm 8 hours.
Malathion (ISO)	**NIOSH REL (United States, 10/2020).** **Absorbed through skin.** TWA: 10 mg/m³ 10 hours. **ACGIH TLV (United States, 1/2022).** **Absorbed through skin.** TWA: 1 mg/m³ 8 hours. Form: Inhalable fraction and vapor **OSHA PEL 1989 (United States, 3/1989).** **Absorbed through skin.** TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 15 mg/m³ 8 hours. Form: Total dust **CAL OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 10 mg/m³ 8 hours.
Flame Photometric Detector Checkout Sample (40)	
2,2,4-trimethylpentane	**ACGIH TLV (United States, 1/2022). [Octane all isomers]** TWA: 300 ppm 8 hours.
Parathion - methyl (ISO)	**OSHA PEL 1989 (United States, 3/1989).** **Absorbed through skin.** TWA: 0.2 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020).** **Absorbed through skin.** TWA: 0.2 mg/m³ 10 hours. **ACGIH TLV (United States, 1/2022).** **Absorbed through skin.** TWA: 0.02 mg/m³ 8 hours. Form: Inhalable fraction and vapor **CAL OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 0.2 mg/m³ 8 hours.
Headspace OQ/PV Standard	
Ethanol	**ACGIH TLV (United States, 1/2022).** STEL: 1000 ppm 15 minutes. **OSHA PEL 1989 (United States, 3/1989).** TWA: 1000 ppm 8 hours.

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	TWA: 1900 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020).** TWA: 1000 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. **OSHA PEL (United States, 5/2018).** TWA: 1000 ppm 8 hours. TWA: 1900 mg/m³ 8 hours. **CAL OSHA PEL (United States, 5/2018).** TWA: 1900 mg/m³ 8 hours. TWA: 1000 ppm 8 hours.
nitrobenzene	**ACGIH TLV (United States, 1/2022).** **Absorbed through skin.** TWA: 1 ppm 8 hours. TWA: 5 mg/m³ 8 hours. **OSHA PEL 1989 (United States, 3/1989).** **Absorbed through skin.** TWA: 1 ppm 8 hours. TWA: 5 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020).** **Absorbed through skin.** TWA: 1 ppm 10 hours. TWA: 5 mg/m³ 10 hours. **OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 1 ppm 8 hours. TWA: 5 mg/m³ 8 hours. **CAL OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 5 mg/m³ 8 hours. TWA: 1 ppm 8 hours.
1,2-Dichlorobenzene	**ACGIH TLV (United States, 1/2022).** TWA: 25 ppm 8 hours. TWA: 150 mg/m³ 8 hours. STEL: 50 ppm 15 minutes. STEL: 301 mg/m³ 15 minutes. **OSHA PEL 1989 (United States, 3/1989).** CEIL: 50 ppm CEIL: 300 mg/m³ **NIOSH REL (United States, 10/2020).** CEIL: 50 ppm CEIL: 300 mg/m³ **OSHA PEL (United States, 5/2018).** CEIL: 50 ppm CEIL: 300 mg/m³ **CAL OSHA PEL (United States, 5/2018).** **Absorbed through skin.** C: 50 ppm TWA: 150 mg/m³ 8 hours. TWA: 25 ppm 8 hours.

Biological exposure indices

Section 8. Exposure controls/personal protection

Ingredient name	Exposure indices
Flame Ionization Detector (FID) Sample-0.33%(w/w)	
n-Hexane	**ACGIH BEI (United States, 1/2022)** BEI: 0.5 mg/l, 2,5-hexanedion [in urine]. Sampling time: end of shift.
Nitrogen/Phosphorus Detector Sample	
Malathion (ISO)	**ACGIH BEI (United States, 1/2022) [CHOLINESTERASE INHIBITING PESTICIDES]** BEI: 70 % of individual's baseline activity, acetylcholinesterase activity [in red blood cells]. Sampling time: end of shift. BEI: 60 % of individual's baseline activity, butyrylcholinesterase activity [in serum or plasma]. Sampling time: end of shift.
Flame Photometric Detector Checkout Sample (40)	
Parathion - methyl (ISO)	**ACGIH BEI (United States, 1/2022) [CHOLINESTERASE INHIBITING PESTICIDES]** BEI: 70 % of individual's baseline activity, acetylcholinesterase activity [in red blood cells]. Sampling time: end of shift. BEI: 60 % of individual's baseline activity, butyrylcholinesterase activity [in serum or plasma]. Sampling time: end of shift.
Headspace OQ/PV Standard	
nitrobenzene	**ACGIH BEI (United States, 1/2022)** BEI: 1.5 % of hemoglobin [Semi-quantitative: The determinant is an indicator of exposure to the chemical, but the quantitative interpretation of the measurement is ambiguous. These determinants should be used as a screening test if a quantitative test is not practical or as a confirmatory test if the quantitative test is not specific and the origin of the determinant is in question.], methemoglobin [in blood]. Sampling time: during or 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.

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.

Section 8. Exposure controls/personal protection

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.

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.

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.

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 :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Liquid. [Clear.]
	Electron Capture Detector Sample	Liquid.
	Nitrogen/Phosphorus Detector Sample	Liquid.
	Flame Photometric Detector Checkout Sample (40)	Liquid.
	Headspace OQ/PV Standard	Liquid.
Color :	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Colorless.
	Electron Capture Detector Sample	Not available.
	Nitrogen/Phosphorus Detector Sample	Not available.
	Flame Photometric Detector Checkout Sample (40)	Clear. Colorless.
	Headspace OQ/PV Standard	Clear. Colorless.

Section 9. Physical and chemical properties and safety characteristics

Odor	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Gasoline-like
		Electron Capture Detector Sample	Not available.
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	Gasoline-like
		Headspace OQ/PV Standard	Ethereal. Vinous.
Odor threshold	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not available.
		Electron Capture Detector Sample	Not available.
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	Not available.
		Headspace OQ/PV Standard	Not available.
pH	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not available.
		Electron Capture Detector Sample	Not available.
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	Not available.
		Headspace OQ/PV Standard	Not available.
Melting point/freezing point	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	-100 to -95°C (-148 to -139°F)
		Electron Capture Detector Sample	-107°C (-160.6°F)
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	-107°C (-160.6°F)
		Headspace OQ/PV Standard	-117°C (-178.6°F)
Boiling point, initial boiling point, and boiling range	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	69°C (156.2°F)
		Electron Capture Detector Sample	99°C (210.2°F)
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	99.2°C (210.6°F)
		Headspace OQ/PV Standard	78.3°C (172.9°F)
Flash point	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Closed cup: -22°C (-7.6°F) [Tagliabue]
		Electron Capture Detector Sample	Closed cup: -18 to 23°C (-0.4 to 73.4°F)
		Nitrogen/Phosphorus Detector Sample	Closed cup: -18 to 23°C (-0.4 to 73.4°F)
		Flame Photometric Detector Checkout Sample (40)	Open cup: 4.5°C (40.1°F)
		Headspace OQ/PV Standard	Open cup: 12.7°C (54.9°F)
Evaporation rate	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not available.
		Electron Capture Detector Sample	>1 (butyl acetate = 1)
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	Not available.
		Headspace OQ/PV Standard	>4 (butyl acetate = 1)

Section 9. Physical and chemical properties and safety characteristics

Flammability :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not applicable.
Electron Capture Detector Sample	Not applicable.
Nitrogen/Phosphorus Detector Sample	Not applicable.
Flame Photometric Detector Checkout Sample (40)	Not applicable.
Headspace OQ/PV Standard	Not applicable.

Lower and upper explosion limit/flammability limit :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Lower: 1.1% Upper: 7.5%
Electron Capture Detector Sample	Lower: 1.1% Upper: 6%
Nitrogen/Phosphorus Detector Sample	Not available.
Flame Photometric Detector Checkout Sample (40)	Lower: 1% Upper: 6%
Headspace OQ/PV Standard	Lower: 3.3% Upper: 19%

Vapor pressure :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	20 kPa (150 mm Hg)
Flame Photometric Detector Checkout Sample (40)	5.5 kPa (41 mm Hg)
Headspace OQ/PV Standard	5.7 kPa (43 mm Hg)

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Electron Capture Detector Sample						
2,2,4-trimethylpentane	21	2.8	-	150.01	20	-
Nitrogen/ Phosphorus Detector Sample						
2,2,4-trimethylpentane	21	2.8	-	150.01	20	-

Relative vapor density :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	2.97 [Air = 1]
Electron Capture Detector Sample	>1 [Air = 1]
Nitrogen/Phosphorus Detector Sample	Not available.
Flame Photometric Detector Checkout Sample (40)	3.93 [Air = 1]
Headspace OQ/PV Standard	1.7 [Air = 1]

Relative density :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	0.66
Electron Capture Detector Sample	0.69
Nitrogen/Phosphorus Detector Sample	Not available.
Flame Photometric Detector Checkout Sample (40)	Not available.
Headspace OQ/PV Standard	Not available.

Section 9. Physical and chemical properties and safety characteristics

Solubility(ies) :

Media	Result
Flame Ionization Detector (FID) Sample-0.33%(w/w)	
water	Insoluble
Electron Capture Detector Sample	
methanol	Insoluble
diethyl ether	Soluble
water	Insoluble
Nitrogen/Phosphorus Detector Sample	
methanol	Insoluble
diethyl ether	Soluble
water	Insoluble
Flame Photometric Detector Checkout Sample (40)	
water	Insoluble
Headspace OQ/PV Standard	
water	Soluble

Partition coefficient: n-octanol/water :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	3.9 to 4.11
Electron Capture Detector Sample	Not applicable.
Nitrogen/Phosphorus Detector Sample	Not applicable.
Flame Photometric Detector Checkout Sample (40)	Not applicable.
Headspace OQ/PV Standard	Not applicable.

Auto-ignition temperature :

Electron Capture Detector Sample	417°C (782.6°F)
Flame Photometric Detector Checkout Sample (40)	418°C (784.4°F)
Headspace OQ/PV Standard	422°C (791.6°F)

Ingredient name	°C	°F	Method
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
n-Hexane	225	437	-
Nitrogen/Phosphorus Detector Sample			
2,2,4-trimethylpentane	418	784.4	-

Decomposition temperature :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not available.
Electron Capture Detector Sample	Not available.
Nitrogen/Phosphorus Detector Sample	Not available.
Flame Photometric Detector Checkout Sample (40)	Not available.
Headspace OQ/PV Standard	Not available.

Viscosity :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not available.
Electron Capture Detector Sample	Not available.
Nitrogen/Phosphorus Detector Sample	Not available.
Flame Photometric Detector Checkout Sample (40)	Not available.
Headspace OQ/PV Standard	Not available.

Particle characteristics

Section 9. Physical and chemical properties and safety characteristics

Median particle size	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Not applicable.
		Electron Capture Detector Sample	Not applicable.
		Nitrogen/Phosphorus Detector Sample	Not applicable.
		Flame Photometric Detector Checkout Sample (40)	Not applicable.
		Headspace OQ/PV Standard	Not applicable.

Section 10. Stability and reactivity

10.1 Reactivity	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	No specific test data related to reactivity available for this product or its ingredients.
		Electron Capture Detector Sample	No specific test data related to reactivity available for this product or its ingredients.
		Nitrogen/Phosphorus Detector Sample	No specific test data related to reactivity available for this product or its ingredients.
		Flame Photometric Detector Checkout Sample (40)	No specific test data related to reactivity available for this product or its ingredients.
		Headspace OQ/PV Standard	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	The product is stable.
		Electron Capture Detector Sample	The product is stable.
		Nitrogen/Phosphorus Detector Sample	The product is stable.
		Flame Photometric Detector Checkout Sample (40)	The product is stable.
		Headspace OQ/PV Standard	The product is stable.
10.3 Possibility of hazardous reactions	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Under normal conditions of storage and use, hazardous reactions will not occur.
		Electron Capture Detector Sample	Under normal conditions of storage and use, hazardous reactions will not occur.
		Nitrogen/Phosphorus Detector Sample	Under normal conditions of storage and use, hazardous reactions will not occur.
		Flame Photometric Detector Checkout Sample (40)	Under normal conditions of storage and use, hazardous reactions will not occur.
		Headspace OQ/PV Standard	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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.
		Electron Capture Detector Sample	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.
		Nitrogen/Phosphorus Detector Sample	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.
		Flame Photometric Detector Checkout Sample (40)	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

Section 10. Stability and reactivity

		of ignition. Do not allow vapor to accumulate in low or confined areas.
	Headspace OQ/PV Standard	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.

10.5 Incompatible materials :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Reactive or incompatible with the following materials: oxidizing materials
Electron Capture Detector Sample	Reactive or incompatible with the following materials: oxidizing materials
Nitrogen/Phosphorus Detector Sample	Reactive or incompatible with the following materials: oxidizing materials
Flame Photometric Detector Checkout Sample (40)	Reactive or incompatible with the following materials: oxidizing materials
Headspace OQ/PV Standard	Reactive or incompatible with the following materials: oxidizing materials

10.6 Hazardous decomposition products :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Electron Capture Detector Sample	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Nitrogen/Phosphorus Detector Sample	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Flame Photometric Detector Checkout Sample (40)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Headspace OQ/PV Standard	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
Flame Ionization Detector (FID) Sample-0.33%(w/w)				
n-Hexane	LC50 Inhalation Vapor	Rat	169.2 mg/l	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
Electron Capture Detector Sample				
2,2,4-trimethylpentane	LC50 Inhalation Vapor	Rat - Male, Female	>33.52 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
Nitrogen/Phosphorus				

Section 11. Toxicological information

Detector Sample				
2,2,4-trimethylpentane	LC50 Inhalation Vapor	Rat - Male, Female	>33.52 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
Malathion (ISO)	LC50 Inhalation Dusts and mists	Rat	43790 µg/m³	4 hours
	LD50 Dermal	Rabbit	4100 mg/kg	-
	LD50 Oral	Rat	290 mg/kg	-
Flame Photometric Detector Checkout Sample (40)				
2,2,4-trimethylpentane	LC50 Inhalation Vapor	Rat - Male, Female	>33.52 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
Parathion - methyl (ISO)	LC50 Inhalation Dusts and mists	Rat	34 mg/m³	4 hours
	LD50 Dermal	Rabbit	300 mg/kg	-
	LD50 Dermal	Rat	67 mg/kg	-
	LD50 Oral	Rat	6 mg/kg	-
Headspace OQ/PV Standard				
Ethanol	LC50 Inhalation Vapor	Rat	124700 mg/m³	4 hours
	LD50 Oral	Rat	7 g/kg	-
nitrobenzene	LC50 Inhalation Vapor	Rat	556 ppm	4 hours
	LD50 Dermal	Rabbit	760 mg/kg	-
	LD50 Dermal	Rat	2100 mg/kg	-
	LD50 Oral	Rat	349 mg/kg	-
1,2-Dichlorobenzene	LC50 Inhalation Dusts and mists	Rat	8150 mg/m³	4 hours
	LD50 Dermal	Rabbit	>10 g/kg	-
	LD50 Oral	Rat	500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Flame Ionization Detector (FID) Sample-0.33%(w/w)					
n-Hexane	Eyes - Mild irritant	Rabbit	-	10 mg	-
Headspace OQ/PV Standard					
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	100 uL	-
nitrobenzene	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
1,2-Dichlorobenzene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Section 11. Toxicological information

Classification

Product/ingredient name	OSHA	IARC	NTP
Nitrogen/Phosphorus Detector Sample			
Malathion (ISO)	-	2A	-
Flame Photometric Detector Checkout Sample (40)			
Parathion - methyl (ISO)	-	3	-
Headspace OQ/PV Standard			
Ethanol	-	1	-
nitrobenzene	-	2B	Reasonably anticipated to be a human carcinogen.
1,2-Dichlorobenzene	-	3	-

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
n-Hexane	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Electron Capture Detector Sample			
2,2,4-trimethylpentane	Category 3	-	Narcotic effects
Nitrogen/Phosphorus Detector Sample			
2,2,4-trimethylpentane	Category 3	-	Narcotic effects
Flame Photometric Detector Checkout Sample (40)			
2,2,4-trimethylpentane	Category 3	-	Narcotic effects
Headspace OQ/PV Standard			
1,2-Dichlorobenzene	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
n-Hexane	Category 2	inhalation	nervous system
Nitrogen/Phosphorus Detector Sample			
Malathion (ISO)	Category 2	-	nervous system
Flame Photometric Detector Checkout Sample (40)			
Parathion - methyl (ISO)	Category 2	-	central nervous system (CNS), nervous system

Section 11. Toxicological information

Headspace OQ/PV Standard nitrobenzene	Category 1	inhalation	blood system

Aspiration hazard

Name	Result
Flame Ionization Detector (FID) Sample-0.33%(w/w)	
Flame Ionization Detector (FID) Sample-0.33%(w/w)	ASPIRATION HAZARD - Category 1
n-Hexane	ASPIRATION HAZARD - Category 1
Electron Capture Detector Sample	
Electron Capture Detector Sample	ASPIRATION HAZARD - Category 1
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1
Nitrogen/Phosphorus Detector Sample	
Nitrogen/Phosphorus Detector Sample	ASPIRATION HAZARD - Category 1
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1
Flame Photometric Detector Checkout Sample (40)	
Flame Photometric Detector Checkout Sample (40)	ASPIRATION HAZARD - Category 1
2,2,4-trimethylpentane	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Electron Capture Detector Sample	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Nitrogen/Phosphorus Detector Sample	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Flame Photometric Detector Checkout Sample (40)	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Headspace OQ/PV Standard	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Causes eye irritation.
Electron Capture Detector Sample	No known significant effects or critical hazards.
Nitrogen/Phosphorus Detector Sample	No known significant effects or critical hazards.
Flame Photometric Detector Checkout Sample (40)	No known significant effects or critical hazards.
Headspace OQ/PV Standard	Causes serious eye irritation.

Inhalation :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Electron Capture Detector Sample	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Nitrogen/Phosphorus Detector Sample	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Flame Photometric Detector Checkout Sample (40)	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Headspace OQ/PV Standard	No known significant effects or critical hazards.

Skin contact :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Causes skin irritation.
Electron Capture Detector Sample	Causes skin irritation.
Nitrogen/Phosphorus Detector Sample	Causes skin irritation.
Flame Photometric Detector Checkout Sample (40)	Causes skin irritation.
Headspace OQ/PV Standard	No known significant effects or critical hazards.

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Ingestion :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Electron Capture Detector Sample	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Nitrogen/Phosphorus Detector Sample	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Flame Photometric Detector Checkout Sample (40)	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.
Headspace OQ/PV Standard	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: pain or irritation watering redness
Electron Capture Detector Sample	Adverse symptoms may include the following: pain or irritation watering redness
Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: pain or irritation watering redness
Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: pain or irritation watering redness
Headspace OQ/PV Standard	Adverse symptoms may include the following: pain or irritation watering redness

Inhalation :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	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
Electron Capture Detector Sample	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: nausea or vomiting

Section 11. Toxicological information

			headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
		Headspace OQ/PV Standard	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
		Electron Capture Detector Sample	Adverse symptoms may include the following: irritation redness
		Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: irritation redness
		Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: irritation redness
		Headspace OQ/PV Standard	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations
		Electron Capture Detector Sample	Adverse symptoms may include the following: nausea or vomiting
		Nitrogen/Phosphorus Detector Sample	Adverse symptoms may include the following: nausea or vomiting
		Flame Photometric Detector Checkout Sample (40)	Adverse symptoms may include the following: nausea or vomiting
		Headspace OQ/PV Standard	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

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

Short term exposure

Section 11. Toxicological information

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	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	May cause damage to organs through prolonged or repeated exposure.
		Electron Capture Detector Sample	No known significant effects or critical hazards.
		Nitrogen/Phosphorus Detector Sample	No known significant effects or critical hazards.
		Flame Photometric Detector Checkout Sample (40)	No known significant effects or critical hazards.
		Headspace OQ/PV Standard	No known significant effects or critical hazards.
Carcinogenicity	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	No known significant effects or critical hazards.
		Electron Capture Detector Sample	No known significant effects or critical hazards.
		Nitrogen/Phosphorus Detector Sample	No known significant effects or critical hazards.
		Flame Photometric Detector Checkout Sample (40)	No known significant effects or critical hazards.
		Headspace OQ/PV Standard	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	No known significant effects or critical hazards.
		Electron Capture Detector Sample	No known significant effects or critical hazards.
		Nitrogen/Phosphorus Detector Sample	No known significant effects or critical hazards.
		Flame Photometric Detector Checkout Sample (40)	No known significant effects or critical hazards.
		Headspace OQ/PV Standard	No known significant effects or critical hazards.
Reproductive toxicity	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Suspected of damaging fertility or the unborn child.
		Electron Capture Detector Sample	No known significant effects or critical hazards.
		Nitrogen/Phosphorus Detector Sample	No known significant effects or critical hazards.
		Flame Photometric Detector Checkout Sample (40)	No known significant effects or critical hazards.
		Headspace OQ/PV Standard	May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Flame Ionization Detector (FID) Sample-0.33%(w/w)					
n-Hexane	15840	N/A	N/A	169.2	N/A
Nitrogen/Phosphorus Detector Sample					
Malathion (ISO)	290	4100	N/A	N/A	0.04379
Flame Photometric Detector Checkout Sample					

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(40)					
Parathion - methyl (ISO)	6	67	N/A	N/A	0.034
Headspace OQ/PV Standard					
Ethanol	7000	N/A	N/A	124.7	N/A
nitrobenzene	349	760	N/A	2.8	N/A
1,2-Dichlorobenzene	500	N/A	N/A	11	8.15

Other information : Flame Ionization Detector (FID) Sample-0.33%(w/w)

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

Headspace OQ/PV Standard

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

Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
n-Hexane	Acute LC50 2500 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
Nitrogen/Phosphorus Detector Sample			
Malathion (ISO)	Acute EC50 0.5 µg/l Fresh water	Crustaceans - *Ceriodaphnia dubia* - Neonate	48 hours
	Acute LC50 0.9 µg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 11.676 ng/L Fresh water	Fish - *Heteropneustes fossilis*	96 hours
	Chronic NOEC 34 mg/l Fresh water	Algae - *Euglena gracilis*	72 hours
	Chronic NOEC 0.5 mg/l Marine water	Crustaceans - *Scylla serrata*	3 weeks
	Chronic NOEC 0.06 ppb Fresh water	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC 21 ppb	Fish - *Oncorhynchus mykiss*	97 days
Flame Photometric Detector Checkout Sample (40)			
Parathion - methyl (ISO)	Acute EC50 2900 µg/l Fresh water	Algae - *Chlamydomonas reinhardtii*	4 days
	Acute EC50 15000 µg/l Fresh water	Algae - *Desmodesmus subspicatus*	72 hours
	Acute EC50 0.172 µg/l Fresh water	Crustaceans - *Hyalella azteca* - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute EC50 1.8 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 18400 µg/l Fresh water	Aquatic plants - *Azolla pinnata*	96 hours
	Acute LC50 5 µg/l Fresh water	Fish - *Gambusia affinis*	96 hours
	Chronic NOEC 220 µg/l Fresh water	Algae - *Chlamydomonas reinhardtii*	4 days
	Chronic NOEC 4 mg/l Fresh water	Aquatic plants - *Lemna minor*	96 hours
	Chronic NOEC 0.43 ppb Fresh water	Daphnia - *Daphnia magna*	21 days
	Chronic NOEC 8.86 ppb	Fish - *Cyprinodon variegatus*	38 days
Headspace OQ/PV Standard			
Ethanol	Acute EC50 3306 mg/l Marine water	Algae - *Ulva pertusa*	96 hours
	Acute EC50 1074 mg/l Fresh water	Crustaceans - *Cypris subglobosa*	48 hours

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	Acute LC50 5680 mg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 11000000 µg/l Marine water	Fish - *Alburnus alburnus*	96 hours
	Chronic NOEC 4.995 mg/l Marine water	Algae - *Ulva pertusa*	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - *Daphnia magna* - Neonate	21 days
nitrobenzene	Acute EC50 9.95 ppm Marine water	Algae - *Skeletonema costatum*	72 hours
	Acute EC50 9.65 ppm Marine water	Algae - *Skeletonema costatum*	96 hours
	Acute LC50 5.86 ppm Marine water	Crustaceans - *Americamysis bahia*	48 hours
	Acute LC50 7.2 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 44.1 mg/l Fresh water	Fish - *Pimephales promelas* - Larvae	96 hours
	Chronic NOEC 9200 µg/l Fresh water	Algae - *Chlorella pyrenoidosa*	72 hours
	Chronic NOEC 2.6 mg/l Fresh water	Daphnia - *Daphnia magna*	21 days
1,2-Dichlorobenzene	Acute EC50 12.8 mg/l	Algae - *Phaeodactylum tricornutum*	72 hours
	Acute EC50 0.74 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 4.52 ppm Marine water	Crustaceans - *Americamysis bahia*	48 hours
	Acute LC50 1.4 mg/l Fresh water	Fish - *Gibelion catla*	96 hours
	Chronic NOEC 5 mg/l	Algae - *Chlorella vulgaris*	4 days
	Chronic NOEC 0.63 mg/l Fresh water	Daphnia - *Daphnia magna*	21 days

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Headspace OQ/PV Standard				
nitrobenzene	OECD 301F Ready Biodegradability - Manometric Respirometry Test	50 to 60 % - Readily - 28 days	100 mg/l	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
n-Hexane	-	-	Readily
Electron Capture Detector Sample			
2,2,4-trimethylpentane	-	-	Inherent
Nitrogen/Phosphorus Detector Sample			
2,2,4-trimethylpentane	-	-	Inherent
Flame Photometric Detector Checkout Sample (40)			
2,2,4-trimethylpentane	-	-	Inherent
Parathion - methyl (ISO)	Fresh water 40 days, pH 7, 25°C	-	-
Headspace OQ/PV Standard			
Ethanol	-	-	Readily
nitrobenzene	-	-	Readily

Section 12. Ecological information

1,2-Dichlorobenzene	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
Flame Ionization Detector (FID) Sample-0.33%(w/w)	3.9 to 4.11	-	High
n-Hexane	4	501.187	High
Electron Capture Detector Sample			
2,2,4-trimethylpentane	4.08	231	Low
Nitrogen/Phosphorus Detector Sample			
2,2,4-trimethylpentane	4.08	231	Low
Malathion (ISO)	2.36	33.11	Low
Flame Photometric Detector Checkout Sample (40)			
2,2,4-trimethylpentane	4.08	231	Low
Parathion - methyl (ISO)	2.86	85.11	Low
Headspace OQ/PV Standard			
Ethanol	-0.35	0.5	Low
nitrobenzene	1.86	3.1 to 4.8	Low
1,2-Dichlorobenzene	3.38	150 to 230	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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 13. Disposal considerations

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

Remarks: De minimis quantities

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 8(a) PAIR: 1,2-Dichlorobenzene

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

Clean Water Act (CWA) 307: nitrobenzene; 1,2-Dichlorobenzene; Gamma-HCH or gamma-BHC; Aldrin (ISO)

Clean Water Act (CWA) 311: nitrobenzene; 1,2-Dichlorobenzene; Parathion - methyl (ISO); Malathion (ISO); Gamma-HCH or gamma-BHC; Aldrin (ISO)

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

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

Section 15. Regulatory information

Name	%	EHS	SARA 302 TPQ (lbs)	SARA 302 TPQ (gallons)	SARA 304 RQ (lbs)	SARA 304 RQ (gallons)
Electron Capture Detector Sample						
Gamma-HCH or gamma-BHC	<0.0001	Yes.	1000 / 10000	-	1	-
Aldrin (ISO)	<0.0001	Yes.	500 / 10000	-	1	-
Flame Photometric Detector Checkout Sample (40)						
Parathion - methyl (ISO)	<0.001	Yes.	100 / 10000	-	100	-
Headspace OQ/PV Standard						
nitrobenzene	≤0.3	Yes.	10000	999.5	1000	99.9

SARA 304 RQ : 1987281.4 lbs / 902225.8 kg

SARA 311/312

Classification :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	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
Electron Capture Detector Sample	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
Nitrogen/Phosphorus Detector Sample	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
Flame Photometric Detector Checkout Sample (40)	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
Headspace OQ/PV Standard	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B

Composition/information on ingredients

Name	%	Classification
Flame Ionization Detector (FID) Sample-0.33%(w/w)		
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
Electron Capture Detector Sample		

Section 15. Regulatory information

2,2,4-trimethylpentane	≥90	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Static-accumulating flammable liquid
Nitrogen/Phosphorus Detector Sample		
2,2,4-trimethylpentane	≥90	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Static-accumulating flammable liquid
Flame Photometric Detector Checkout Sample (40)		
2,2,4-trimethylpentane	≥90	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1 HNOC - Static-accumulating flammable liquid
Headspace OQ/PV Standard		
Ethanol	≥90	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A HNOC - Defatting irritant
nitrobenzene	≤0.3	FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 EYE IRRITATION - Category 2B CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	**Flame Ionization Detector (FID) Sample-0.33% (w/w)**		
	n-Hexane	110-54-3	≥90
	Headspace OQ/PV Standard		
	nitrobenzene	98-95-3	≤0.3
Supplier notification	**Flame Ionization Detector (FID) Sample-0.33% (w/w)**		
	n-Hexane	110-54-3	≥90
	Headspace OQ/PV Standard		
	nitrobenzene	98-95-3	≤0.3

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: ISOOCTANE; HEXANE; ETHYL ALCOHOL

New York : The following components are listed: 2,2,4-Trimethylpentane; Hexane

New Jersey : The following components are listed: ISOOCTANE; n-HEXANE; ETHYL ALCOHOL

Pennsylvania : The following components are listed: PENTANE, 2,2,4-TRIMETHYL-; HEXANE; ETHANOL

California Prop. 65

Section 15. Regulatory information

⚠ **WARNING**: This product can expose you to chemicals including Nitrobenzene, 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 Azobenzene, Malathion, Hexachlorocyclohexane (gamma isomer) and Aldrin, which are known to the State of California to cause cancer, and n-hexane, which is 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
Flame Ionization Detector (FID) Sample-0.33%(w/w)		
n-hexane	-	Yes.
Electron Capture Detector Sample		
Hexachlorocyclohexane (gamma isomer)	Yes.	-
Aldrin	Yes.	-
Nitrogen/Phosphorus Detector Sample		
Azobenzene	Yes.	-
Malathion	Yes.	-
Headspace OQ/PV Standard		
Nitrobenzene	-	-

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.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : Not determined.

Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): All components are listed or exempted.

New Zealand : Not determined.

Philippines : All components are listed or exempted.

Republic of Korea : Not determined.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : All components are listed or exempted.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Flame Ionization Detector (FID) Sample-0.33%(w/w)	
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
Electron Capture Detector Sample	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN IRRITATION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
ASPIRATION HAZARD - Category 1	Expert judgment
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method
Nitrogen/Phosphorus Detector Sample	
FLAMMABLE LIQUIDS - Category 2	Expert judgment
SKIN IRRITATION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
ASPIRATION HAZARD - Category 1	Expert judgment
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method
Flame Photometric Detector Checkout Sample (40)	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN IRRITATION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
ASPIRATION HAZARD - Category 1	Expert judgment
AQUATIC HAZARD (ACUTE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 1	Calculation method
Headspace OQ/PV Standard	
FLAMMABLE LIQUIDS - Category 2	On basis of test data
EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method

History

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Section 16. Other information

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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