SAFETY DATA SHEET

Agilent Technologies

GC Checkout Standards Kit, Part Number 5188-5358

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

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

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

Uses advised against : None known.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Deutschland GmbH
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Mixture
Electron Capture Detector Sample	Mixture
Nitrogen/Phosphorus Detector Sample	Mixture
Flame Photometric Detector Checkout	Mixture

SECTION 2: Hazards identification

Sample (40)	
Headspace OQ/PV Standard	Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

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

H225	FLAMMABLE LIQUIDS	Category 2
H315	SKIN CORROSION/IRRITATION	Category 2
H361f	REPRODUCTIVE TOXICITY	Category 2
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	LONG-TERM (CHRONIC) AQUATIC HAZARD	Category 2

Electron Capture Detector Sample

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

Nitrogen/Phosphorus Detector Sample

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

Flame Photometric Detector Checkout Sample (40)

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

Headspace OQ/PV Standard

H225	FLAMMABLE LIQUIDS	Category 2
H319	SERIOUS EYE DAMAGE/EYE IRRITATION	Category 2
H412	LONG-TERM (CHRONIC) AQUATIC HAZARD	Category 3

Flame Ionization Detector (FID) Sample-0.33%(w/w)	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Electron Capture Detector Sample	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Nitrogen/Phosphorus Detector Sample	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Flame Photometric Detector Checkout Sample (40)	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
Headspace OQ/PV Standard	The product is classified as hazardous according to Regulation (EC) 1272/2008 as

SECTION 2: Hazards identification

amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

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 vapour.

H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H361f - Suspected of damaging fertility.
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 vapour.

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 vapour.

H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.

SECTION 2: Hazards identification

		H336 - May cause drowsiness or dizziness. H410 - Very toxic to aquatic life with long lasting effects.
	Flame Photometric Detector Checkout Sample (40)	H225 - Highly flammable liquid and vapour. 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 vapour. H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	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. P273 - Avoid release to the environment.
		Electron Capture Detector Sample	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment.
		Nitrogen/Phosphorus Detector Sample	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment.
		Flame Photometric Detector Checkout Sample (40)	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment.
		Headspace OQ/PV Standard	P280 - Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment.
Response	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	P391 - Collect spillage.
		Electron Capture Detector Sample	P391 - Collect spillage. P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
		Nitrogen/Phosphorus Detector Sample	P391 - Collect spillage. P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
		Flame Photometric Detector Checkout Sample (40)	P391 - Collect spillage. P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
		Headspace OQ/PV Standard	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.

SECTION 2: Hazards identification

Storage	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
		Electron Capture Detector Sample	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
		Nitrogen/Phosphorus Detector Sample	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
		Flame Photometric Detector Checkout Sample (40)	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
		Headspace OQ/PV Standard	Not applicable.
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.
Hazardous ingredients	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	n-hexane
		Electron Capture Detector Sample	2,2,4-trimethylpentane
		Nitrogen/Phosphorus Detector Sample	2,2,4-trimethylpentane
		Flame Photometric Detector Checkout Sample (40)	2,2,4-trimethylpentane
Supplemental label elements	:	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	Contains 1,2-dichlorobenzene. May produce an allergic reaction.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	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.

Special packaging requirements

SECTION 2: Hazards identification

Tactile warning of danger :

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.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Electron Capture Detector Sample	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Nitrogen/Phosphorus Detector Sample	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Flame Photometric Detector Checkout Sample (40)	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Headspace OQ/PV Standard	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification :

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

3.1 Substances :

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

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Flame Ionization Detector (FID) Sample-0.33%(w/w)					
n-hexane	EC: 203-777-6 CAS: 110-54-3 Index: 601-037-00-0	≥90	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361f STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2,	STOT RE 2, H373: C ≥ 5%	[1] [2]

SECTION 3: Composition/information on ingredients

			H411		
Electron Capture Detector Sample					
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1	≥90	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Nitrogen/Phosphorus Detector Sample					
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1	≥90	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
malathion (ISO)	EC: 204-497-7 CAS: 121-75-5 Index: 015-041-00-X	≤0.1	Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1000 M [Chronic] = 1000	[1] [2]
Flame Photometric Detector Checkout Sample (40)					
2,2,4-trimethylpentane	EC: 208-759-1 CAS: 540-84-1	≥90	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Headspace OQ/PV Standard					
ethanol	EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≥90	Flam. Liq. 2, H225 Eye Irrit. 2, H319	-	[1] [2]
nitrobenzene	EC: 202-716-0 CAS: 98-95-3 Index: 609-003-00-7	<0.3	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Carc. 2, H351 Repr. 1B, H360F STOT RE 1, H372 (blood) Aquatic Chronic 3, H412	ATE [Oral] = 100 mg/kg ATE [Dermal] = 760 mg/kg ATE [Inhalation (vapours)] = 2.8 mg/l	[1] [2]
1,2-dichlorobenzene	EC: 202-425-9 CAS: 95-50-1	≤0.3	Acute Tox. 4, H302 Acute Tox. 4, H332	ATE [Oral] = 500 mg/kg	[1] [2]

SECTION 3: Composition/information on ingredients

	Index: 602-034-00-7		Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 **See Section 16 for the full text of the H statements declared above.**	ATE [Inhalation (vapours)] = 11 mg/l M [Acute] = 1 M [Chronic] = 1	

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

Flame Ionization Detector (FID) Sample-0.33%(w/w)	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit
Electron Capture Detector Sample	[1] Substance classified with a health or environmental hazard
Nitrogen/Phosphorus Detector Sample	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit
Flame Photometric Detector Checkout Sample (40)	[1] Substance classified with a health or environmental hazard
Headspace OQ/PV Standard	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of 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	Remove victim to fresh air and keep at rest in a position

SECTION 4: First aid measures

	Detector Sample	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 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 adverse health effects persist or are severe. 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. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes

SECTION 4: First aid measures

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. 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 if adverse health effects persist or are severe. 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

SECTION 4: First aid measures

tight clothing such as a collar, tie, belt or waistband.

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :

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	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.
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.

SECTION 4: First aid measures

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 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: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations

SECTION 4: First aid measures

		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	No specific data.
Skin contact	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal 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	No specific data.
Ingestion	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: nausea or vomiting reduced foetal weight increase in foetal 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:

SECTION 4: First aid measures

		nausea or vomiting
	Headspace OQ/PV Standard	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

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 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.

SECTION 5: Firefighting 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.
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

SECTION 5: Firefighting measures

Hazards from the substance or mixture	: Flame Ionization Detector (FID) Sample-0.33%(w/w)	Highly flammable liquid and vapour. 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 vapour/gas is heavier than air and will spread along the ground. Vapours 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 vapour. 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 vapour/gas is heavier than air and will spread along the ground. Vapours 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 vapour. 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 vapour. 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 vapour/gas is heavier than air and will spread along the ground. Vapours 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 vapour. 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 vapour/gas is heavier than air and will spread along the ground. Vapours 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 combustion 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

SECTION 5: Firefighting measures

		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 precautions 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 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	Headspace OQ/PV Standard	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full

SECTION 5: Firefighting measures

face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour 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 surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour 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 specialised 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 specialised 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 specialised 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-

SECTION 6: Accidental release measures

		emergency personnel".
	Flame Photometric Detector Checkout Sample (40)	If specialised 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 specialised 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 spilt 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 spilt 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 spilt 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.
	Flame Photometric Detector Checkout Sample (40)	Avoid dispersal of spilt 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 spilt 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 material 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,

SECTION 6: Accidental release measures

	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.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

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 vapour 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 vapour 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 vapour 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

SECTION 7: Handling and storage

		hazardous. Do not reuse container.
	Flame Photometric Detector Checkout Sample (40)	Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour 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 Checkout Sample (40)	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.
	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

SECTION 7: Handling and storage

Storage	: 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 oxidising 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 unlabelled 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 oxidising 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 unlabelled 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 oxidising 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 unlabelled 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 incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	Headspace OQ/PV Standard	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. Eliminate all ignition sources. Separate from oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

SECTION 7: Handling and storage

Category	Notification and MAPP threshold	Safety report threshold
Flame Ionization Detector (FID) Sample-0.33%(w/w)		
P5c	5000 tonne	50000 tonne
E2	200 tonne	500 tonne
Electron Capture Detector Sample		
P5c	5000 tonne	50000 tonne
E1	100 tonne	200 tonne
Nitrogen/Phosphorus Detector Sample		
P5c	5000 tonne	50000 tonne
E1	100 tonne	200 tonne
Flame Photometric Detector Checkout Sample (40)		
P5c	5000 tonne	50000 tonne
E1	100 tonne	200 tonne
Headspace OQ/PV Standard		
P5c	5000 tonne	50000 tonne

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

Product/ingredient name	Exposure limit values
Flame Ionization Detector (FID) Sample-0.33%(w/w)	
n-hexane	**NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values** OELV-8hr: 20 ppm 8 hours. OELV-8hr: 72 mg/m³ 8 hours.
Nitrogen/Phosphorus Detector Sample	

SECTION 8: Exposure controls/personal protection

malathion (ISO)	**NAOSH (Ireland, 5/2021). Absorbed through skin. Sensitization potential. Notes: Advisory Occupational Exposure Limit Values (OELVs)** OELV-8hr: 1 mg/m³ 8 hours. Form: The Inhalable Fraction and Vapour note is used when a material exerts sufficient vapour pressure such that it may be present in both particle and vapour phases.
Headspace OQ/PV Standard	
ethanol	**NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)** OELV-15min: 1000 ppm 15 minutes.
nitrobenzene	**NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values** OELV-8hr: 0.2 ppm 8 hours. OELV-8hr: 1 mg/m³ 8 hours.
1,2-dichlorobenzene	**NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU derived Occupational Exposure Limit Values** OELV-8hr: 20 ppm 8 hours. OELV-8hr: 122 mg/m³ 8 hours. OELV-15min: 50 ppm 15 minutes. OELV-15min: 306 mg/m³ 15 minutes.

Biological exposure indices

Product/ingredient name	Exposure indices
Flame Ionization Detector (FID) Sample-0.33%(w/w)	
n-hexane	**NAOSH (Ireland, 1/2011)** BMGV: 0.4 mg/l, 2,5-hexanedione [in urine]. Sampling time: end of shift at end of workweek.
Headspace OQ/PV Standard	
nitrobenzene	**NAOSH (Ireland, 1/2011)** BMGV: 1.5 % of haemoglobin [Semi-quantitative, the biological analyte is an indicator of exposure to the substance but the quantitative interpretation of the measurement is ambiguous. These analytes 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.], methaemoglobin [in blood]. Sampling time: end of shift - As soon as possible after exposure ceases. BMGV: 5 mg/g creatinine, p-nitrophenol [in urine]. Sampling time: end of shift at end of workweek.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
Flame Ionization Detector (FID) Sample-0.33%(w/w)					
n-hexane	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	5.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	16 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	75 mg/m³	Workers	Systemic
Electron Capture Detector Sample					
2,2,4-trimethylpentane	DNEL	Long term Inhalation	608 mg/m³	General population	Systemic
	DNEL	Long term Oral	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	773 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2035 mg/m³	Workers	Systemic
Nitrogen/Phosphorus Detector Sample					
2,2,4-trimethylpentane	DNEL	Long term Inhalation	608 mg/m³	General population	Systemic
	DNEL	Long term Oral	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	773 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2035 mg/m³	Workers	Systemic
Flame Photometric Detector Checkout Sample (40)					
2,2,4-trimethylpentane	DNEL	Long term Inhalation	608 mg/m³	General population	Systemic
	DNEL	Long term Oral	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	773 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2035 mg/m³	Workers	Systemic
Headspace OQ/PV Standard					
ethanol	DNEL	Long term Oral	87 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	114 mg/m³	General population	Systemic
	DNEL	Long term Dermal	206 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	343 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	950 mg/m³	General population	Local

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Inhalation	950 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	1900 mg/m³	Workers	Local
1,2-dichlorobenzene	DNEL	Long term Oral	0.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1 mg/m³	General population	Systemic
	DNEL	Long term Dermal	1.2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	4.2 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	5 mg/m³	General population	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	21 mg/m³	Workers	Systemic

PNECs

No PNECs available

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.

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 8: Exposure controls/personal protection

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 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

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

SECTION 9: Physical and chemical properties

Melting point/freezing point	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	-100 to -95°C
		Electron Capture Detector Sample	-107°C
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	-107°C
		Headspace OQ/PV Standard	-117°C
Initial boiling point and boiling range	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	69°C
		Electron Capture Detector Sample	99°C
		Nitrogen/Phosphorus Detector Sample	Not available.
		Flame Photometric Detector Checkout Sample (40)	99.2°C
		Headspace OQ/PV Standard	78.3°C
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.
Upper/lower flammability or explosive limits	:	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%
Flash point	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Closed cup: -22°C [Tagliabue]
		Electron Capture Detector Sample	Closed cup: -18 to 23°C
		Nitrogen/Phosphorus Detector Sample	Closed cup: -18 to 23°C
		Flame Photometric Detector Checkout Sample (40)	Open cup: 4.5°C
		Headspace OQ/PV	Open cup: 12.7°C

SECTION 9: Physical and chemical properties

Auto-ignition temperature :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	417°C
Electron Capture Detector Sample	418°C
Nitrogen/Phosphorus Detector Sample	422°C
Flame Photometric Detector Checkout Sample (40)	
Headspace OQ/PV Standard	

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

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.

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.

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.

SECTION 9: Physical and chemical properties

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.

Vapour 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	Vapour Pressure at 20˚C			Vapour 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	-

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	Not available.

SECTION 9: Physical and chemical properties

		Sample (40) Headspace OQ/PV Standard	>4 (butyl acetate = 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.
Vapour 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]
Explosive properties	:	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.
Oxidising properties	:	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			
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.

SECTION 9: Physical and chemical properties

Headspace OQ/PV Standard	Not applicable.

9.2 Other information

No additional information.

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 pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
	Electron Capture Detector Sample	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
	Nitrogen/Phosphorus Detector Sample	Avoid all possible sources of ignition (spark or flame). Do not pressurise, 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 pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.

SECTION 10: Stability and reactivity

	Headspace OQ/PV Standard	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour 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: oxidising materials
	Electron Capture Detector Sample	Reactive or incompatible with the following materials: oxidising materials
	Nitrogen/Phosphorus Detector Sample	Reactive or incompatible with the following materials: oxidising materials
	Flame Photometric Detector Checkout Sample (40)	Reactive or incompatible with the following materials: oxidising materials
	Headspace OQ/PV Standard	Reactive or incompatible with the following materials: oxidising 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 Vapour	Rat	169.2 mg/l	4 hours
	LD50 Oral	Rat	15840 mg/kg	-
Electron Capture Detector Sample				
2,2,4-trimethylpentane	LC50 Inhalation Vapour	Rat - Male, Female	>33.52 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
Nitrogen/Phosphorus Detector Sample				
2,2,4-trimethylpentane	LC50 Inhalation Vapour	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	-

SECTION 11: Toxicological information

Flame Photometric Detector Checkout Sample (40)				
2,2,4-trimethylpentane	LC50 Inhalation Vapour	Rat - Male, Female	>33.52 mg/l	4 hours
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
Headspace OQ/PV Standard				
ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m³	4 hours
	LD50 Oral	Rat	7 g/kg	-
nitrobenzene	LC50 Inhalation Vapour	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	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (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)	500	4100	N/A	N/A	N/A
Headspace OQ/PV Standard					
Headspace OQ/PV Standard	39745.7	302067.1	N/A	1112.9	N/A
ethanol	7000	N/A	N/A	124.7	N/A
nitrobenzene	100	760	N/A	2.8	N/A
1,2-dichlorobenzene	500	N/A	N/A	11	8.15

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	-

Sensitiser

Conclusion/Summary : Not available.

SECTION 11: Toxicological information

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
n-hexane	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)

Product/ingredient name	Category	Route of exposure	Target organs
Flame Ionization Detector (FID) Sample-0.33%(w/w)			
n-hexane	Category 2	-	-
Headspace OQ/PV Standard			
nitrobenzene	Category 1	-	blood

Aspiration hazard

Product/ingredient 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

SECTION 11: Toxicological information

Information on 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

Inhalation :

Flame Ionization Detector (FID) Sample-0.33%(w/w)	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
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.

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.

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.

Eye contact :

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	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

SECTION 11: Toxicological information

Inhalation	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal 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	No specific data.
Ingestion	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: nausea or vomiting reduced foetal weight increase in foetal 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	No specific data.
Skin contact	:	Flame Ionization Detector (FID) Sample-0.33%(w/w)	Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
		Electron Capture	Adverse symptoms may include the following:

SECTION 11: Toxicological information

		Detector Sample	
			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	No specific data.
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

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

SECTION 11: Toxicological information

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	No known significant effects or critical hazards.
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.
		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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 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
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
	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	-

SECTION 12: Ecological information

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
Headspace OQ/PV Standard			
ethanol	-	-	Readily
nitrobenzene	-	-	Readily
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
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.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

SECTION 12: Ecological information

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised 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.

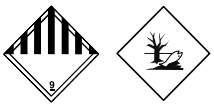
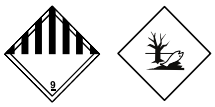
Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	UN3316	UN3316	UN3316
14.2 UN proper shipping name	CHEMICAL KIT	CHEMICAL KIT	Chemical kit
14.3 Transport hazard class(es)	9 	9 	9 
14.4 Packing group	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

Remarks: De minimis quantities

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Hazard identification number 90
Limited quantity See SP 251
Special provisions 251, 340, 671
Tunnel code (E)

SECTION 14: Transport information

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-A, _S-P_
Special provisions 251, 340

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 10 kg. Packaging instructions: 960. Cargo Aircraft Only: 10 kg. Packaging instructions: 960. Limited Quantities - Passenger Aircraft: 1 kg. Packaging instructions: Y960.
Special provisions A44, A163

14.6 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.

14.7 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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Ingredient name	Intrinsic property	Status	Reference number	Date of revision
Headspace OQ/PV Standard nitrobenzene	Toxic to reproduction	Candidate	ED/79/2015	12/17/2015

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product / Ingredient name	Identifiers	Designation [Usage]
Flame Ionization Detector (FID) Sample-0.33%(w/w) Flame Ionization Detector (FID) Sample-0.33% (w/w)	-	3
Electron Capture Detector Sample Electron Capture Detector Sample	-	3
Nitrogen/Phosphorus Detector Sample Nitrogen/Phosphorus Detector Sample	-	3
Flame Photometric Detector Checkout Sample (40) Flame Photometric Detector Checkout Sample (40)	-	3
Headspace OQ/PV Standard Headspace OQ/PV Standard	-	3

SECTION 15: Regulatory information

Label	:	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.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
Flame Ionization Detector (FID) Sample-0.33%(w/w) P5c E2
Electron Capture Detector Sample P5c E1
Nitrogen/Phosphorus Detector Sample P5c E1
Flame Photometric Detector Checkout Sample (40) P5c E1
Headspace OQ/PV Standard P5c

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.

SECTION 15: Regulatory information

China : Not determined.

Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.

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.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flame Ionization Detector (FID) Sample-0.33%(w/w)	
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Repr. 2, H361f	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Chronic 2, H411	Calculation method
Electron Capture Detector Sample	
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method
Nitrogen/Phosphorus Detector Sample	
Flam. Liq. 2, H225	Expert judgment
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method
Flame Photometric Detector Checkout Sample (40)	

SECTION 16: Other information

Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT SE 3, H336	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method
Headspace OQ/PV Standard	
Flam. Liq. 2, H225	On basis of test data
Eye Irrit. 2, H319	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

Flame Ionization Detector (FID) Sample-0.33% (w/w)	
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
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 vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Nitrogen/Phosphorus Detector Sample	
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Flame Photometric Detector Checkout Sample (40)	
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
Headspace OQ/PV Standard	
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H360F	May damage fertility.

SECTION 16: Other information

H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Flame Ionization Detector (FID) Sample-0.33% (w/w)	
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Electron Capture Detector Sample	
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Nitrogen/Phosphorus Detector Sample	
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Flame Photometric Detector Checkout Sample (40)	
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Headspace OQ/PV Standard	
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 2	CARCINOGENICITY - Category 2
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

SECTION 16: Other information

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Notice to reader

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