SAFETY DATA SHEET

Agilent Technologies

2D-LC Solution

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

1.1 Product identifier

Product name : 2D-LC Solution

Part no. : 5190-6895

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

Identified uses : Reagents and Standards for Analytical Chemistry Laboratory Use
1 x 2 ml

Uses advised against : None known.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.
5500 Lakeside Cheadle Royal Business Park,
Cheadle, Cheshire, SK8 3GR
United Kingdom
Tel: +44 (0) 345 712 5292

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 20 3807 3798

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

H225	FLAMMABLE LIQUIDS	Category 2
H302	ACUTE TOXICITY (oral)	Category 4
H312	ACUTE TOXICITY (dermal)	Category 4
H332	ACUTE TOXICITY (inhalation)	Category 4
H319	SERIOUS EYE DAMAGE/EYE IRRITATION	Category 2
H350	CARCINOGENICITY	Category 1B
H400	SHORT-TERM (ACUTE) AQUATIC HAZARD	Category 1
H410	LONG-TERM (CHRONIC) AQUATIC HAZARD	Category 1

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as 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 :

Signal word : Danger

SECTION 2: Hazards identification

Hazard statements : H225 - Highly flammable liquid and vapour.
H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled.
H319 - Causes serious eye irritation.
H350 - May cause cancer.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 - Avoid release to the environment.

Response : P391 - Collect spillage.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : acetonitrile and diuron (ISO)

Supplemental label elements : Repeated exposure may cause skin dryness or cracking.
Contains atrazine (ISO), metazachlor (ISO) and desethylterbutylazine. May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : 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 : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥75 - ≤90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
acetone	EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8	≥10 - <20	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
atrazine (ISO)	EC: 217-617-8 CAS: 1912-24-9 Index: 613-068-00-7	≤0.3	Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400	[1]

SECTION 3: Composition/information on ingredients

			(M=100) Aquatic Chronic 1, H410 (M=100)	
1,3,5-Triazine-2,4-diamine, 6-chloro-N(sup 2)-(1-methylethyl)-	CAS: 6190-65-4	≤0.3	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
chlorotoluron (ISO)	EC: 239-592-2 CAS: 15545-48-9 Index: 616-105-00-5	≤0.3	Carc. 2, H351 Repr. 2, H361d Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=10)	[1]
diuron (ISO)	EC: 206-354-4 CAS: 330-54-1 Index: 006-015-00-9	≤0.3	Carc. 1B, H350 STOT RE 2, H373 (blood system) Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1] [2]
hexazinone (ISO)	EC: 257-074-4 CAS: 51235-04-2 Index: 613-132-00-4	≤0.3	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1]
linuron (ISO)	EC: 206-356-5 CAS: 330-55-2 Index: 006-021-00-1	<0.3	Acute Tox. 4, H302 Carc. 2, H351 Repr. 1B, H360Df STOT RE 2, H373 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1]
metazachlor (ISO)	EC: 266-583-0 CAS: 67129-08-2 Index: 616-205-00-9	≤0.3	Skin Sens. 1B, H317 Carc. 2, H351 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1]
methabenzthiazuron (ISO)	EC: 242-505-0 CAS: 18691-97-9 Index: 613-137-00-1	≤0.3	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
metoxuron (ISO)	EC: 243-433-2 CAS: 19937-59-8 Index: 006-033-00-7	≤0.3	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
prometryn	EC: 230-711-3 CAS: 7287-19-6	≤0.3	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1]
terbuthylazine (ISO)	EC: 227-637-9 CAS: 5915-41-3 Index: 613-323-00-2	≤0.3	Acute Tox. 4, H302 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
desethylterbutylazine	CAS: 30125-63-4	≤0.3	Skin Sens. 1, H317	[1]

SECTION 3: Composition/information on ingredients

			Aquatic Chronic 1, H410 (M=10) **See Section 16 for the full text of the H statements declared above.**	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[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 : 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 : 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

SECTION 4: First aid measures

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : 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.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
cyanides

5.3 Advice for firefighters

Special protective actions for fire-fighters : 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 : 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 British standard BS 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 : 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 : 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 : 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.

SECTION 6: Accidental release measures

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : 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 : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Avoid release to the environment. Avoid contact with eyes, skin and clothing. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Advice on general occupational hygiene : 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

Storage : 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.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c E1	5000 tonnes 100 tonnes	50000 tonnes 200 tonnes

7.3 Specific end use(s)

Recommendations : Industrial applications, Professional applications.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
acetonitrile	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 102 mg/m³. STEL 15 minutes: 60 ppm. TWA 8 hours: 40 ppm. TWA 8 hours: 68 mg/m³.
acetone	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** STEL 15 minutes: 3620 mg/m³. STEL 15 minutes: 1500 ppm. TWA 8 hours: 500 ppm. TWA 8 hours: 1210 mg/m³.
diuron (ISO)	**EH40/2005 WELs (United Kingdom (UK), 1/2020)** TWA 8 hours: 10 mg/m³.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS 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

Product/ingredient name	Result	
acetonitrile	DNEL - General population - Long term - Oral	0.4 mg/kg bw/day
	DNEL - General population - Short term - Oral	0.6 mg/kg bw/day
	DNEL - General population - Long term - Dermal	1.2 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	2.4 mg/m³
acetone	DNEL - General population - Long term - Oral	62 mg/kg bw/day
	DNEL - General population - Long term - Dermal	62 mg/kg bw/day
	DNEL - Workers - Long term - Dermal	186 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	200 mg/m³
	DNEL - Workers - Long term - Inhalation	1210 mg/m³
	DNEL - Workers - Short term - Inhalation	2420 mg/m³
diuron (ISO)	DNEL - Workers - Long term - Inhalation	0.17 mg/m³
	DNEL - Workers - Long term - Dermal	5.79 mg/kg bw/day
prometryn	DNEL - General population - Long term - Oral	0.12 mg/kg bw/day
	DNEL - General population - Long term - Dermal	0.22 mg/kg bw/day
	DNEL - General population - Long term - Inhalation	0.38 mg/m³
	DNEL - Workers - Long term - Dermal	0.62 mg/kg bw/day
	DNEL - Workers - Long term - Inhalation	2.22 mg/m³

SECTION 8: Exposure controls/personal protection

PNECs

Not 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. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to British Standard BS EN 1149 for further information on material and design requirements and test methods.

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.

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 : Liquid.

Colour : Not available.

Odour : Not available.

Odour threshold : Not available.

Melting point/freezing point : Not available.

SECTION 9: Physical and chemical properties

Initial boiling point and boiling range : Not available.

Flammability : Not applicable.

Lower and upper explosion limit/ flammability limit : Not available.

Flash point : Closed cup: -18 to 23°C

Auto-ignition temperature :

Ingredient name	°C	Method
acetone	465	-
acetonitrile	524	-

Decomposition temperature : Not available.

pH : Not available.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C): Not available.

Solubility :

Media	Result
water	Soluble

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure :

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
acetone	180.01463	24	-	-	-	-
acetonitrile	70.88853	9.5	-	-	-	-

Relative density : Not available.

Vapour density : Not available.

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosive properties : Not available.

Oxidising properties : Not available.

9.2.2 Other safety characteristics

Miscible with water : Yes.

Evaporation rate : Not available.

Physical/chemical properties comments : Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 10: Stability and reactivity

10.4 Conditions to avoid : 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.

10.5 Incompatible materials : Reactive or incompatible with the following materials: oxidising materials

10.6 Hazardous decomposition products : 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	
acetonitrile	Rat - Oral - LD50	2460 mg/kg
	Rat - Inhalation - LC50 Vapour	17100 ppm [4 hours]
acetone	Rat - Oral - LD50	5800 mg/kg
atrazine (ISO)	Rabbit - Dermal - LD50	7500 mg/kg
	Rat - Oral - LD50	672 mg/kg
	Rat - Dermal - LD50	3 g/kg
	Rat - Inhalation - LC50 Dusts and mists	5200 mg/m³ [4 hours]
chlorotoluron (ISO)	Rat - Oral - LD50	5800 mg/kg
diuron (ISO)	Rat - Dermal - LD50	>5 g/kg
	Rat - Oral - LD50	1 g/kg
	Rat - Male, Female - Inhalation - LC50 Dusts and mists	>5.05 mg/l [4 hours]
hexazinone (ISO)	Rat - Oral - LD50	1690 mg/kg
	Rat - Dermal - LD50	5278 mg/kg
	Rabbit - Dermal - LD50	>5278 mg/kg
linuron (ISO)	Rat - Oral - LD50	1146 mg/kg
	Rabbit - Dermal - LD50	>5 g/kg
	Rat - Inhalation - LC50 Dusts and mists	48 mg/m³ [4 hours]
metazachlor (ISO)	Rat - Oral - LD50	1 g/kg
	Rat - Dermal - LD50	>6810 mg/kg
metoxuron (ISO)	Rat - Oral - LD50	1600 mg/kg
prometryn	Rat - Oral - LD50	1802 mg/kg
terbuthylazine (ISO)	Rat - Oral - LD50	1845 mg/kg
	Rat - Dermal - LD50	>2000 mg/kg
	Rat - Inhalation - LC50 Dusts and mists	>5.3 mg/l [4 hours]

Conclusion/Summary [Product] : Not available.

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)
2D-LC Solution	638.8	1405.3	N/A	14.1	N/A
acetonitrile	500	1100	N/A	11	N/A
acetone	5800	20000	N/A	76	N/A
atrazine (ISO)	N/A	3000	N/A	N/A	5.2
1,3,5-Triazine-2,4-diamine, 6-chloro-N(sup 2)-(1-methylethyl)-	500	N/A	N/A	N/A	1.5
chlorotoluron (ISO)	5800	N/A	N/A	N/A	N/A
hexazinone (ISO)	1690	5278	N/A	N/A	N/A
linuron (ISO)	1146	N/A	N/A	N/A	N/A
prometryn	1802	N/A	N/A	N/A	N/A
terbuthylazine (ISO)	1845	N/A	N/A	N/A	N/A

Skin corrosion/irritation

Product/ingredient name	Result

SECTION 11: Toxicological information

acetone	Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours Amount/concentration applied: 500 mg
	Rabbit - Skin - Mild irritant	Amount/concentration applied: 395 mg
atrazine (ISO)	Rabbit - Skin - Mild irritant	Amount/concentration applied: 38 mg

Conclusion/Summary [Product] : Repeated exposure may cause skin dryness or cracking.

Ingredient name	Conclusion/Summary
acetone	Repeated exposure may cause skin dryness or cracking. Causes mild skin irritation.

Serious eye damage/eye irritation

Product/ingredient name	Result	
acetonitrile	Rabbit - Eyes - Moderate irritant	Duration of treatment/ exposure: 24 hours Amount/concentration applied: 100 uL
acetone	Rabbit - Eyes - Mild irritant	Amount/concentration applied: 10 uL
	Rabbit - Eyes - Moderate irritant	Duration of treatment/ exposure: 24 hours Amount/concentration applied: 20 mg
atrazine (ISO)	Rabbit - Eyes - Severe irritant	Amount/concentration applied: 6320 ug
hexazinone (ISO)	Rabbit - Eyes - Moderate irritant	Amount/concentration applied: 48 mg
prometryn	Rabbit - Eyes - Mild irritant	Amount/concentration applied: 80 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Conclusion/Summary [Product] : Not available.

Ingredient name	Conclusion/Summary
acetonitrile	May cause respiratory irritation.

Respiratory or skin sensitization

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Conclusion/Summary [Product] : Not available.

SECTION 11: Toxicological information

Reproductive toxicity

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
acetone	STOT SE 3, H336 (Narcotic effects)

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
atrazine (ISO)	STOT RE 2, H373
diuron (ISO)	STOT RE 2, H373 (blood system)
linuron (ISO)	STOT RE 2, H373
terbuthylazine (ISO)	STOT RE 2, H373

Aspiration hazard

Not available.

Information on likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled.

Skin contact : Harmful in contact with skin. Defatting to the skin. May cause skin dryness and irritation.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion : No specific data.

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

SECTION 11: Toxicological information

Conclusion/Summary [Product] : Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Other information : Adverse symptoms may include the following: May cause skin sensitisation.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result		
acetonitrile	Acute - LC50 - Fresh water Daphnia - Water flea - *Daphnia magna* Age: <24 hours 3600 mg/l [48 hours] Mortality	-	-
	Acute - IC50 - Fresh water Aquatic plants - Duckweed - *Lemna minor* 3685 mg/l [96 hours] Population	-	-
	Chronic - NOEC - Fresh water Daphnia - Water flea - *Daphnia magna* Age: <24 hours 160 mg/l [21 days] Reproduction	-	-
	Chronic - NOEC - Fresh water Aquatic plants - Duckweed - *Lemna minor* 1000 mg/l [96 hours] Population	-	-
	Acute - LC50 - Fresh water Fish - Fathead minnow - *Pimephales promelas* Weight: 1.5 g 1000 mg/l [96 hours] Mortality	-	-
acetone	Acute - EC50 - Fresh water Algae - Green algae - *Selenastrum sp.* 7200 mg/l [96 hours] Population	-	-
	Chronic - NOEC - Marine water Algae - Green algae -	-	-

SECTION 12: Ecological information

	Ulva pertusa 4.95 mg/l [96 hours] Reproduction		
	Chronic - NOEC - Fresh water Crustaceans - Daphnia - *Daphniidae* 0.016 ml/l [21 days] Population	-	-
	Acute - LC50 - Marine water ISO Crustaceans - Calanoid copepod - *Acartia tonsa* - Copepodid 4.42589 ml/l [48 hours] Mortality	-	-
	Acute - LC50 - Fresh water Fish - Guppy - *Poecilia reticulata* Age: 4 to 12 months; Size: 2 to 10 cm; Weight: 0.5 to 14 g 5600 ppm [96 hours] Mortality	-	-
atrazine (ISO)	Acute - EC50 - Fresh water Daphnia - Water flea - *Daphnia pulex* 240 µg/l [48 hours] Reproduction	-	-
	Chronic - NOEC - Fresh water Fish - Guppy - *Poecilia reticulata* - Adult 0.26 ppb [16 weeks] Reproduction	-	-
	Acute - LC50 - Fresh water Fish - Carnatic Carp - *Barbodes carnaticus* Weight: 95 to 100 g 1.25 ppm [96 hours] Mortality	-	-
	Chronic - NOEC - Fresh water Crustaceans - Water flea - *Ceriodaphnia sp.* 25 µg/l [21 days] Population	-	-
	Acute - EC50 - Fresh water Algae - Green algae - *Raphidocelis subcapitata* Age: 7 to 14 days 0.004 mg/l [96 hours]	-	-

SECTION 12: Ecological information

	Cells		
	Chronic - NOEC - Fresh water Algae - Green algae - *Raphidocelis subcapitata* Age: 7 to 14 days 0.0005 mg/l [96 hours] Growth	-	-
1,3,5-Triazine-2,4-diamine, 6-chloro-N (sup 2)-(1-methylethyl)-	Acute - EC50 - Fresh water OECD Algae - Green algae - *Chlorella fusca ssp. fusca* - Exponential growth phase 821 µg/l [96 hours] Population	-	-
chlorotoluron (ISO)	Chronic - NOEC - Fresh water Algae - Green algae - *Chlorella pyrenoidosa* - Exponential growth phase 10 µg/l [96 hours] Population	-	-
	Acute - LC50 - Fresh water Fish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss* Age: 4 to 12 months; Size: 2 to 10 cm; Weight: 0.5 to 14 g 35 ppm [96 hours] Mortality	-	-
	Acute - EC50 - Fresh water Algae - Green algae - *Raphidocelis subcapitata* 0.0085 mg/l [96 hours] Population	-	-
diuron (ISO)	Acute - LC50 - Fresh water Fish - Striped bass - *Morone saxatilis* - Larvae 500 µg/l [96 hours] Mortality	-	-
	Acute - LC50 - Fresh water Crustaceans - Scud - *Gammarus lacustris* Age: 2 months 380 µg/l [48 hours] Mortality	-	-
	Chronic - NOEC US EPA Fish - Fathead minnow -	-	-

SECTION 12: Ecological information

	Pimephales promelas 26.4 ppb [60 days] Reproduction		
	Chronic - EC10 - Fresh water Algae - Diatom - *Fragilaria capucina* - Exponential growth phase 0.11 µg/l [96 hours] Population	-	-
	Acute - EC50 - Fresh water Algae - Green algae - *Raphidocelis subcapitata* 0.0007 mg/l [96 hours] Population	-	-
hexazinone (ISO)	Chronic - NOEC - Fresh water Fish - Atlantic salmon - *Salmo salar* - Yolk-sac larvae Age: 21 days; Weight: 46.8 g 85.5 µg/l [396 days] Growth	-	-
	Chronic - NOEC - Fresh water Crustaceans - Copepod Subclass - *Copepoda* 0.1 mg/l [21 days] Population	-	-
	Acute - LC50 - Fresh water US EPA Fish - Rainbow trout, donaldson trout - *Oncorhynchus mykiss* Weight: 0.44 g 146.7 ppm [96 hours] Mortality	-	-
	Acute - LC50 - Fresh water OECD Crustaceans - Signal crayfish - *Pacifastacus leniusculus* - Juvenile (Fledgling, Hatchling, Weanling) Age: 5 to 8; Weight: 49 to 81.5 mg 71.6 mg/l [48 hours] Mortality	-	-
	Acute - IC50 - Marine water Aquatic plants - Eel Grass - *Zostera muelleri*	-	-

SECTION 12: Ecological information

	4.4 µg/l [72 hours] Physiology		
	Chronic - NOEC - Marine water Aquatic plants - Eel Grass - *Halodule uninervis* 0.37 µg/l [72 hours] Physiology	-	-
linuron (ISO)	Chronic - EC10 - Fresh water Algae - Green algae - *Scenedesmus acutus* 1.2 µg/l [3 days] Population	-	-
	Acute - EC50 - Fresh water Algae - Green algae - *Scenedesmus acutus* 6 µg/l [3 days] Population	-	-
	Chronic - NOEC - Fresh water US EPA Daphnia - Water flea - *Daphnia magna* 0.13 ppm [21 days] Mortality	-	-
	Acute - LC50 - Marine water US EPA Fish - Sheepshead minnow - *Cyprinodon variegatus* Weight: 0.2 g 0.89 ppm [96 hours] Mortality	-	-
	Acute - EC50 - Fresh water US EPA Daphnia - Water flea - *Daphnia magna* Age: 1 0.12 ppm [48 hours] Intoxication	-	-
	Chronic - NOEC - Fresh water Fish - Fathead minnow - *Pimephales promelas* - Adult 1 µg/l [28 days] Hormones	-	-
metazachlor (ISO)	Chronic - NOEC OECD Algae - Dinoflagellate - *Prorocentrum minimum* - Exponential growth	-	-

SECTION 12: Ecological information

	phase 0.01 mg/l [72 hours] Population		
	Acute - EC50 Algae - Diatom - *Skeletonema marinoi* - Exponential growth phase 245 µg/l [96 hours] Population	-	-
methabenzthiazuron (ISO)	Acute - EC50 - Fresh water Algae - Green algae - *Raphidocelis subcapitata* 0.0209 mg/l [96 hours] Population	-	-
metoxuron (ISO)	Acute - LC50 - Fresh water Crustaceans - Cyclopoid copepod - *Cyclops strenuus* 122 mg/l [48 hours] Mortality	-	-
	Acute - LC50 - Fresh water Fish - Harlequinfish, red rasbora - *Rasbora heteromorpha* Size: 1 to 3 cm 40 mg/l [96 hours] Mortality	-	-
prometryn	Acute - EC50 - Fresh water Daphnia - Water flea - *Daphnia magna* Age: <24 hours 9700 µg/l [48 hours] Intoxication	-	-
	Acute - LC50 - Fresh water Fish - Zebra danio - *Danio rerio* - Larvae 2300 µg/l [96 hours] Mortality	-	-
	Acute - EC50 - Fresh water Algae - Green algae - *Scenedesmus acutus var. acutus* 0.00165 mg/l [96 hours] Population	-	-
	Chronic - NOEC - Fresh water US EPA Daphnia - Water flea - *Daphnia magna* 1 ppm [21 days]	-	-

SECTION 12: Ecological information

	Growth		
	Chronic - NOEC - Fresh water Fish - Carp - *Carassius sp.* - Juvenile (Fledgling, Hatchling, Weanling) Age: 1 years; Size: 24.18 cm; Weight: 343.64 g 0.51 µg/l [60 days] Growth	-	-
	Chronic - NOEC - Fresh water Algae - Green algae - *Chlamydomonas reinhardtii* 2.5 µg/l [4 days] Enzymes	-	-
terbuthylazine (ISO)	Acute - EC50 - Fresh water US EPA Daphnia - Water flea - *Daphnia magna* Age: <24 hours 21.2 ppm [48 hours] Intoxication	-	-
	Chronic - NOEC - Fresh water OECD Fish - common carp - *Cyprinus carpio* - Embryo Age: 24 hours 820 µg/l [30 days] Enzymes	-	-
	Acute - LC50 - Fresh water Fish - Guppy - *Poecilia reticulata* Age: 4 to 12 months; Size: 2 to 10 cm; Weight: 0.5 to 14 g 1.6 ppm [96 hours] Mortality	-	-
	Acute - EC50 - Fresh water Algae - Green algae - *Raphidocelis subcapitata* 9 µg/l [72 hours] Population	-	-
	Chronic - NOEC - Fresh water Algae - Green algae - *Raphidocelis subcapitata* 2 µg/l [72 hours] Population	-	-
desethylterbutylazine	Chronic - NOEC - Fresh	-	-

SECTION 12: Ecological information

water
OECD
Fish - common carp - *Cyprinus carpio* - Egg
Age: 24 hours
1.8 µg/l [36 days]
Growth

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Product/ingredient name	Result		
acetonitrile	OECD [Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)]	70% [21 days] - Readily	-
atrazine (ISO)	-	9.86% [28 days] - Not readily	-
diuron (ISO)	OECD [Ready Biodegradability - Manometric Respirometry Test]	0% [28 days] - Not readily	-
prometryn	OECD [Ready Biodegradability - CO2 Evolution Test]	0% [28 days] - Not readily	Aerobic

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
acetonitrile	-	-	Readily
acetone	-	-	Readily
atrazine (ISO)	-	-	Not readily
diuron (ISO)	-	-	Not readily
prometryn	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
acetonitrile	-0.34	3	Low
acetone	-0.23	3	Low
atrazine (ISO)	2.59	7.94	Low
1,3,5-Triazine-2,4-diamine, 6-chloro-N(sup 2)-(1-methylethyl)-	1.51	-	Low
chlorotoluron (ISO)	2.41	-	Low
diuron (ISO)	2.84	5.2 [OECD 305 C]	Low
hexazinone (ISO)	1.85	-	Low
linuron (ISO)	3.2	17.78	Low

SECTION 12: Ecological information

metazachlor (ISO)	2.13	-	Low
methabenzthiazuron (ISO)	2.64	-	Low
metoxuron (ISO)	1.64	-	Low
prometryn	3.51	-	Low
terbuthylazine (ISO)	3.21	-	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logKoc	Koc
acetonitrile	0.42	2.62657
acetone	0.56	3.6548
atrazine (ISO)	2.2	173.852
1,3,5-Triazine-2,4-diamine, 6-chloro-N (sup 2)-(1-methylethyl)-	2	98.6632
chlorotoluron (ISO)	2	104.646
diuron (ISO)	2.4	250.231
hexazinone (ISO)	1.7	53.7751
linuron (ISO)	2.7	499.316
metazachlor (ISO)	2.2	151.02
methabenzthiazuron (ISO)	2.8	628.36
metoxuron (ISO)	1.7	52.5977
prometryn	2.8	707.421
terbuthylazine (ISO)	2.3	209.524
desethylterbutylazine	2.1	140.554

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
acetonitrile	No	N/A	Yes	No	N/A	N/A	Yes
acetone	No	No	Yes	No	No	No	Yes
atrazine (ISO)	No	No	No	No	No	No	No
1,3,5-Triazine-2,4-diamine, 6-chloro-N(sup 2)-(1-methylethyl)-	No	N/A	Yes	No	N/A	N/A	Yes
chlorotoluron (ISO)	No	No	No	No	No	No	No
diuron (ISO)	No	No	No	No	No	No	No
hexazinone (ISO)	No	No	No	No	No	No	No
linuron (ISO)	No	No	No	No	No	No	No
metazachlor (ISO)	No	No	No	No	No	No	No
methabenzthiazuron (ISO)	No	No	No	No	No	No	No
metoxuron (ISO)	No	No	No	No	No	No	No
prometryn	N/A	N/A	Yes	Yes	No	N/A	No
terbuthylazine (ISO)	No	No	No	No	No	No	No
desethylterbutylazine	N/A	N/A	Yes	Yes	No	N/A	No

Mobility : Not available.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

SECTION 12: Ecological information

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
acetonitrile	No	N/A	No	No	No	N/A	No
acetone	No	No	No	No	No	No	No
atrazine (ISO)	No	N/A	No	Yes	No	N/A	No
1,3,5-Triazine-2,4-diamine, 6-chloro-N(sup 2)-(1-methylethyl)-	No	N/A	N/A	No	N/A	N/A	N/A
chlorotoluron (ISO)	N/A	N/A	N/A	Yes	N/A	N/A	N/A
diuron (ISO)	No	N/A	No	Yes	No	N/A	No
hexazinone (ISO)	N/A	N/A	N/A	Yes	N/A	N/A	N/A
linuron (ISO)	No	N/A	No	Yes	No	N/A	No
metazachlor (ISO)	No	N/A	N/A	No	N/A	N/A	N/A
methabenzthiazuron (ISO)	No	N/A	N/A	No	N/A	N/A	N/A
metoxuron (ISO)	No	N/A	N/A	No	N/A	N/A	N/A
prometryn	N/A	N/A	N/A	Yes	N/A	N/A	N/A
terbuthylazine (ISO)	N/A	N/A	N/A	Yes	N/A	N/A	N/A
desethylterbutylazine	N/A	N/A	N/A	Yes	N/A	N/A	N/A

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
acetonitrile	No	N/A	No	No	No	N/A	No
acetone	No	No	No	No	No	No	No
atrazine (ISO)	No	No	No	No	No	No	No
1,3,5-Triazine-2,4-diamine, 6-chloro-N(sup 2)-(1-methylethyl)-	No	N/A	N/A	No	N/A	N/A	N/A
chlorotoluron (ISO)	No	No	No	No	No	No	No
diuron (ISO)	No	No	No	No	No	No	No
hexazinone (ISO)	No	No	No	No	No	No	No
linuron (ISO)	No	No	No	No	No	No	No
metazachlor (ISO)	No	No	No	No	No	No	No
methabenzthiazuron (ISO)	No	No	No	No	No	No	No
metoxuron (ISO)	No	No	No	No	No	No	No
prometryn	N/A	N/A	N/A	Yes	N/A	N/A	N/A
terbuthylazine (ISO)	No	No	No	No	No	No	No
desethylterbutylazine	N/A	N/A	N/A	Yes	N/A	N/A	N/A

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP] : The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

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 : 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. The generation of waste should be avoided or minimised wherever possible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

SECTION 13: Disposal considerations

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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	UN1993	UN1993	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Acetonitrile, Acetone)	FLAMMABLE LIQUID, N.O.S. (Acetonitrile, Acetone)	Flammable liquid, n.o.s. (Acetonitrile, Acetone)
14.3 Transport hazard class(es)	3 	3 	3 
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: Excepted Quantity

ADR/RID : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Hazard identification number 33
Limited quantity 1 L
Special provisions 601, 274, 640C
Tunnel code (D/E)

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-E, _S-E_
Special provisions 274

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y341.
Special provisions A3

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

None of the components are listed / The components are not impacted by a restriction

Labelling : Restricted to professional users.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
P5c E1

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Listed

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

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.

SECTION 15: Regulatory information

Inventory list

United States : At least one component is inactive.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = GB CLP-specific Hazard statement
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 2, H225	Expert judgment
Acute Tox. 4, H302	Calculation method
Acute Tox. 4, H312	Calculation method
Acute Tox. 4, H332	Calculation method
Eye Irrit. 2, H319	Calculation method
Carc. 1B, H350	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications

SECTION 16: Other information

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
Carc. 1B	CARCINOGENICITY - Category 1B
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
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of issue/ Date of revision : 24/08/2025

Date of previous issue : 30/01/2024

Version : 7

Notice to reader

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.