

GARDX PROTECT GX2 STAGE 2 WITH GRAPHENE

Date of compilation: 01/11/2023

Revised: 20/06/2025

Version: 5 (Replaced 4)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** GARDX PROTECT GX2 STAGE 2 WITH GRAPHENE
- Other means of identification:**
Not relevant
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses (Industrial user): Auxiliary product for the automotive; water repeller; automotive applications
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
GARDX INTERNATIONAL LTD
LAKE HOUSE, 2 PORT WAY, PORT SOLENT,
PO6 4TY PORTSMOUTH - UNITED KINGDOM
Phone: +44 (0)1243 376426
product@gardxgroup.co.uk
www.gardx.co.uk

AUTOMOTOSOL S.R.O
RYBNÁ 716/24
PRAHA 1
110 00
CZECH REPUBLIC

+420 222 703288
- 1.4 Emergency telephone number:** CCN: 1012486. For 24/7 multilingual advice for spill, leak, fire, exposure, or accident call Chemtrec @ + 442038850382. NPIS: 0344 892 0111 (healthcare professionals only) or NHS 111

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):
Classification of this product has been carried out in accordance with GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567).
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
STOT RE 1: Specific target organ toxicity — Repeated exposure, Hazard Category 1 (Inhalation), H372
- 2.2 Label elements:**
GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):
Danger

Hazard statements:
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure (Inhalation).
Precautionary statements:
P260: Do not breathe vapours
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P314: Get medical advice/attention if you feel unwell.
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.
Supplementary information:
EUH066: Repeated exposure may cause skin dryness or cracking.
EUH208: Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
Substances that contribute to the classification

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SECTION 2: HAZARDS IDENTIFICATION (continued)

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) (CAS: 64742-82-1)

2.3 Other hazards:

Product does not meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Not available

3.2 Mixture:

Chemical description: Wax/es

Components:

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 64742-82-1 EC: 919-446-0 REACH: 01-2119458049-33-XXXX	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT RE 1: H372; STOT SE 3: H336; EUH066 - Danger	10 - <25 %
CAS: Not available EC: 927-632-8 REACH: 01-2119457736-27-XXXX	Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics Asp. Tox. 1: H304; EUH066 - Danger	10 - <25 %
CAS: 61789-77-3 EC: 263-087-6	Quaternary ammonium compounds, dicoco alkylidimethyl, chlorides Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Skin Corr. 1B: H314 - Danger	<1 %
CAS: 25307-17-9 EC: 246-807-3 REACH: 01-2119510876-35-XXXX	2,2'-(octadec-9-enylimino)bisethanol (2 EO) Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1B: H314 - Danger	<1 %
CAS: 1330-20-7 EC: 215-535-7 REACH: 01-2119488216-32-XXXX	Xylene Acute Tox. 4: H312+H332; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger	<1 %
CAS: 100-41-4 EC: 202-849-4 REACH: 01-2119489370-35-XXXX	Ethylbenzene Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	<1 %
CAS: 55406-53-6 EC: 259-627-5 REACH: 01-2120762115-60-XXXX	3-iodo-2-propynyl Butylcarbamate Acute Tox. 3: H331; Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Sens. 1: H317; STOT RE 1: H372 - Danger	<1 %
CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25-XXXX	propan-2-ol Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	<1 %
CAS: 108-65-6 EC: 203-603-9 REACH: 01-2119475791-29-XXXX	2-methoxy-1-methylethyl acetate Flam. Liq. 3: H226 - Warning	<1 %
CAS: 101-84-8 EC: 202-981-2 REACH: 01-2119472545-33-XXXX	Diphenyl ether Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Eye Irrit. 2: H319 - Warning	<1 %
CAS: 55965-84-9 EC: Not available	Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) Acute Tox. 2: H310+H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1C: H314; Skin Sens. 1A: H317; EUH071 - Danger	<1 %
CAS: 67-56-1 EC: 200-659-6 REACH: 01-2119433307-44-XXXX	methanol Acute Tox. 3: H301+H311+H331; Flam. Liq. 2: H225; STOT SE 1: H370 - Danger	<1 %
CAS: 108-88-3 EC: 203-625-9 REACH: 01-2119471310-51-XXXX	Toluene Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger	<1 %

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
Xylene CAS: 1330-20-7 EC: 215-535-7	LD50 oral	Not available	
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation vapour	11 mg/L (4 h)	Rat

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Acute toxicity		Genus
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	LD50 oral	301 mg/kg	Rat
	LD50 dermal	Not available	
	LC50 inhalation vapour	5.38 mg/L *	
Quaternary ammonium compounds, dicoco alkylidimethyl, chlorides CAS: 61789-77-3 EC: 263-087-6	LD50 oral	960 mg/kg	Rat
	LD50 dermal	Not available	
	LC50 inhalation vapour	Not available	
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9 EC: 246-807-3	LD50 oral	1260 mg/kg	Rat
	LD50 dermal	Not available	
	LC50 inhalation vapour	Not available	
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	LD50 oral	Not available	
	LD50 dermal	Not available	
	LC50 inhalation vapour	17.2 mg/L	Rat
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not available	LD50 oral	64 mg/kg	Rat
	LD50 dermal	87.12 mg/kg	Rabbit
	LC50 inhalation vapour	1.433 mg/L *	
methanol CAS: 67-56-1 EC: 200-659-6	LD50 oral	100 mg/kg	
	LD50 dermal	300 mg/kg	
	LC50 inhalation vapour	3 mg/L	

* Equivalent ATE value of the substance applicable to the exposure route of the product. For the ATE value associated with the exposure route of the substance, see section 11.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

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SECTION 5: FIREFIGHTING MEASURES (continued)**Unsuitable extinguishing media:**

Water jet

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.

Spillages in water or sea:

Small spillages:

Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.

Large spillages:

If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling:**

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

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SECTION 7: HANDLING AND STORAGE (continued)

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.: 4 °C

Maximum Temp.: 40 °C

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be assessed in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

Identification	Occupational exposure limits		
methanol ⁽¹⁾ CAS: 67-56-1	WEL (8h)	200 ppm	266 mg/m ³
	WEL (15 min)	250 ppm	333 mg/m ³
Xylene ⁽¹⁾ CAS: 1330-20-7	WEL (8h)	50 ppm	220 mg/m ³
	WEL (15 min)	100 ppm	441 mg/m ³
Ethylbenzene ⁽¹⁾ CAS: 100-41-4	WEL (8h)	100 ppm	441 mg/m ³
	WEL (15 min)	125 ppm	552 mg/m ³
2-methoxy-1-methylethyl acetate ⁽¹⁾ CAS: 108-65-6	WEL (8h)	50 ppm	274 mg/m ³
	WEL (15 min)	100 ppm	548 mg/m ³
Toluene ⁽¹⁾ CAS: 108-88-3	WEL (8h)	50 ppm	191 mg/m ³
	WEL (15 min)	100 ppm	384 mg/m ³
propan-2-ol CAS: 67-63-0	WEL (8h)	400 ppm	999 mg/m ³
	WEL (15 min)	500 ppm	1250 mg/m ³
Diphenyl ether CAS: 101-84-8	WEL (8h)	1 ppm	7 mg/m ³
	WEL (15 min)	2 ppm	14 mg/m ³

⁽¹⁾ Skin

Biological limit values:

BIOLOGICAL MONITORING GUIDANCE VALUES (BMGVs) - EH40/2005

Identification	NULL	NULL	NULL
Xylene CAS: 1330-20-7	1030 mg/g (Creatinine)	Methyl hippuric acid in urine	Post shift

The use of protection equipment will be necessary if the occupational exposure limits are exceeded.

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1 EC: 919-446-0	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	21 mg/kg	Not relevant
	Inhalation	570 mg/m ³	Not relevant	330 mg/m ³	Not relevant
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9 EC: 246-807-3	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	0.42 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	2.96 mg/m ³	Not relevant

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	212 mg/kg	Not relevant
	Inhalation	442 mg/m ³	442 mg/m ³	221 mg/m ³	221 mg/m ³
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	180 mg/kg	Not relevant
	Inhalation	Not relevant	293 mg/m ³	77 mg/m ³	Not relevant
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	2 mg/kg	Not relevant
	Inhalation	0.07 mg/m ³	1.16 mg/m ³	0.023 mg/m ³	1.16 mg/m ³
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	888 mg/kg	Not relevant
	Inhalation	1000 mg/m ³	Not relevant	500 mg/m ³	Not relevant
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	796 mg/kg	Not relevant
	Inhalation	Not relevant	550 mg/m ³	275 mg/m ³	Not relevant
Diphenyl ether CAS: 101-84-8 EC: 202-981-2	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	25 mg/kg	Not relevant
	Inhalation	Not relevant	14 mg/m ³	59 mg/m ³	7 mg/m ³
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	0.04 mg/m ³	Not relevant	0.02 mg/m ³
methanol CAS: 67-56-1 EC: 200-659-6	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	20 mg/kg	Not relevant	20 mg/kg	Not relevant
	Inhalation	130 mg/m ³	130 mg/m ³	130 mg/m ³	130 mg/m ³
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	384 mg/kg	Not relevant
	Inhalation	384 mg/m ³	384 mg/m ³	192 mg/m ³	192 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1 EC: 919-446-0	Oral	Not relevant	Not relevant	21 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	12 mg/kg	Not relevant
	Inhalation	570 mg/m ³	Not relevant	71 mg/m ³	Not relevant
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9 EC: 246-807-3	Oral	Not relevant	Not relevant	0.15 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	0.15 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	0.522 mg/m ³	Not relevant
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Not relevant	Not relevant	12.5 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	125 mg/kg	Not relevant
	Inhalation	260 mg/m ³	260 mg/m ³	65.3 mg/m ³	65.3 mg/m ³
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Oral	Not relevant	Not relevant	1.6 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	15 mg/m ³	Not relevant
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	51 mg/kg	Not relevant	26 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	319 mg/kg	Not relevant
	Inhalation	178 mg/m ³	Not relevant	114 mg/m ³	Not relevant
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Not relevant	Not relevant	36 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	320 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	33 mg/m ³	33 mg/m ³

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	Oral	0.11 mg/kg	Not relevant	0.09 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	0.04 mg/m ³	Not relevant	0.02 mg/m ³
Methanol CAS: 67-56-1 EC: 200-659-6	Oral	4 mg/kg	Not relevant	4 mg/kg	Not relevant
	Dermal	4 mg/kg	Not relevant	4 mg/kg	Not relevant
	Inhalation	26 mg/m ³	26 mg/m ³	26 mg/m ³	26 mg/m ³
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Not relevant	Not relevant	8.13 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	226 mg/kg	Not relevant
	Inhalation	226 mg/m ³	226 mg/m ³	56.5 mg/m ³	56.5 mg/m ³

PNEC:

Identification				
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9 EC: 246-807-3	STP	1.5 mg/L	Fresh water	0.00016 mg/L
	Soil	5 mg/kg	Marine water	0.000016 mg/L
	Intermittent	0.00043 mg/L	Sediment (Fresh water)	1.692 mg/kg
	Oral	2 g/kg	Sediment (Marine water)	0.169 mg/kg
Xylene CAS: 1330-20-7 EC: 215-535-7	STP	6.58 mg/L	Fresh water	0.327 mg/L
	Soil	2.31 mg/kg	Marine water	0.327 mg/L
	Intermittent	0.327 mg/L	Sediment (Fresh water)	12.46 mg/kg
	Oral	Not relevant	Sediment (Marine water)	12.46 mg/kg
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	STP	9.6 mg/L	Fresh water	0.1 mg/L
	Soil	2.68 mg/kg	Marine water	0.01 mg/L
	Intermittent	0.1 mg/L	Sediment (Fresh water)	13.7 mg/kg
	Oral	0.02 g/kg	Sediment (Marine water)	1.37 mg/kg
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	STP	0.44 mg/L	Fresh water	0.001 mg/L
	Soil	0.005 mg/kg	Marine water	0 mg/L
	Intermittent	0.001 mg/L	Sediment (Fresh water)	0.017 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.002 mg/kg
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	STP	2251 mg/L	Fresh water	140.9 mg/L
	Soil	28 mg/kg	Marine water	140.9 mg/L
	Intermittent	140.9 mg/L	Sediment (Fresh water)	552 mg/kg
	Oral	0.16 g/kg	Sediment (Marine water)	552 mg/kg
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	STP	100 mg/L	Fresh water	0.635 mg/L
	Soil	0.29 mg/kg	Marine water	0.064 mg/L
	Intermittent	6.35 mg/L	Sediment (Fresh water)	3.29 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.329 mg/kg
Diphenyl ether CAS: 101-84-8 EC: 202-981-2	STP	10 mg/L	Fresh water	0 mg/L
	Soil	0.018 mg/kg	Marine water	0 mg/L
	Intermittent	0.005 mg/L	Sediment (Fresh water)	0.093 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.009 mg/kg
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	STP	0.23 mg/L	Fresh water	0.00339 mg/L
	Soil	0.01 mg/kg	Marine water	0.00339 mg/L
	Intermittent	0.00339 mg/L	Sediment (Fresh water)	0.027 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0.027 mg/kg
Methanol CAS: 67-56-1 EC: 200-659-6	STP	100 mg/L	Fresh water	20.8 mg/L
	Soil	100 mg/kg	Marine water	2.08 mg/L
	Intermittent	1540 mg/L	Sediment (Fresh water)	77 mg/kg
	Oral	Not relevant	Sediment (Marine water)	7.7 mg/kg

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GARDX PROTECT GX2 STAGE 2 WITH GRAPHENE

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Toluene	STP	13.61 mg/L	Fresh water	0.68 mg/L
CAS: 108-88-3	Soil	2.89 mg/kg	Marine water	0.68 mg/L
EC: 203-625-9	Intermittent	0.68 mg/L	Sediment (Fresh water)	16.39 mg/kg
	Oral	Not relevant	Sediment (Marine water)	16.39 mg/kg

8.2 Exposure controls:
A.- Individual protection measures, such as personal protective equipment

All data contained herein are recommendations, in accordance with the order of importance to control professional exposure, it is recommended to use the product in a well-ventilated area, as a protection measure to avoid exceeding exposure limits. In case of using personal protective equipment, it should have <> or <. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection) consult manufacturers leaflets / information. For additional information see Section 7.1.

B.- Respiratory protection: No specific requirements under normal conditions of use. Respiratory protection complying with approved standard should be worn if risk assessment indicates inhalation of contaminants is possible.

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: A2P2)	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands: Chemical resistant, impervious gloves complying with approved standard should be worn if risk assessment indicates skin contact is possible.

Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.1 mm, Conditions of use: Splashing)	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection, chemical splash goggles or face shield.

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection: Body protection complying with an approved standard should be worn if a risk assessment indicates contact is possible.

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2022 y EN 13832-1:2019

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Environmental exposure controls:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Emulsion
Colour:	Greenish
Odour:	Scented
Odour threshold:	Not relevant *

Volatility:

Boiling point at atmospheric pressure:	118 °C
Vapour pressure at 20 °C:	2237 Pa
Vapour pressure at 50 °C:	11805.86 Pa (11.81 kPa)
Evaporation rate at 20 °C:	Not relevant *

Product description:

Density at 20 °C:	Not relevant *
Relative density at 25 °C:	0.964 - 0.984
Dynamic viscosity at 25 °C:	65000 - 85000 mPa·s
Kinematic viscosity at 20 °C:	Not relevant *
Kinematic viscosity at 40 °C:	>20.5 mm²/s
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Emulsifiable
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

Flammability:

Flash Point:	62 °C
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	202 °C
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

Particle characteristics:

Median equivalent diameter:	Not relevant *
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9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *
Other safety characteristics:	
Surface tension at 20 °C:	Not relevant *
Refraction index:	Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous as a result of a single exposure. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Serious health effects in the case of prolonged inhalation, including death, serious functional disorders or morphological changes of toxicological importance.
- Skin: Repeated exposure may cause skin dryness or cracking

H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1 EC: 919-446-0	LD50 oral	>5100 mg/kg	Rat
	LD50 dermal	>3160 mg/kg	Rabbit
	LC50 inhalation vapour	>20 mg/L (4 h)	Rat
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics CAS: Not relevant EC: 927-632-8	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation mist	>5.26 mg/L (4 h)	Rat
Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides CAS: 61789-77-3 EC: 263-087-6	LD50 oral	960 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9 EC: 246-807-3	LD50 oral	1260 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation vapour	>20 mg/L	
Xylene CAS: 1330-20-7 EC: 215-535-7	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation vapour	11 mg/L (4 h)	Rat
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	LD50 oral	3500 mg/kg	Rat
	LD50 dermal	15354 mg/kg	Rabbit
	LC50 inhalation vapour	17.2 mg/L	Rat
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	LD50 oral	301 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	Rat
	LC50 inhalation dust	0.67 mg/L (4 h)	Rat
	LC50 inhalation mist	0.67 mg/L (4 h)	Rat
propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	>5840 mg/kg	Rat
	LD50 dermal	>13900 mg/kg	Rabbit
	LC50 inhalation vapour	>25 mg/L (6 h)	Rat

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LD50 oral	8532 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rat
	LC50 inhalation vapour	30 mg/L (4 h)	Rat
Diphenyl ether CAS: 101-84-8 EC: 202-981-2	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	7940 mg/kg	Rabbit
	LC50 inhalation dust	>5 mg/L	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	LD50 oral	64 mg/kg	Rat
	LD50 dermal	87.12 mg/kg	Rabbit
	LC50 inhalation mist	0.33 mg/L (4 h)	Rat
methanol CAS: 67-56-1 EC: 200-659-6	LD50 oral	100 mg/kg	
	LD50 dermal	300 mg/kg	
	LC50 inhalation vapour	3 mg/L	
Toluene CAS: 108-88-3 EC: 203-625-9	LD50 oral	5580 mg/kg	Rat
	LD50 dermal	12124 mg/kg	Rat
	LC50 inhalation vapour	28.1 mg/L (4 h)	Rat

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Harmful to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration	Species	Genus
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1	LC50	>1 - 10 mg/L (96 h)	Fish
	EC50	>1 - 10 mg/L (48 h)	Crustacean
	EC50	>1 - 10 mg/L (72 h)	Algae
Quaternary ammonium compounds, dicoco alkylidimethyl, chlorides CAS: 61789-77-3	LC50	>0.1 mg/L (96 h)	Danio rerio
	EC50	Not relevant	
	EC50	Not relevant	N/A
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9	LC50	0.1 mg/L (96 h)	Danio rerio
	EC50	0.043 mg/L (48 h)	Daphnia magna
	EC50	0.0867 mg/L (72 h)	Pseudokirchneriella subcapitata
Xylene CAS: 1330-20-7	LC50	>10 - 100 mg/L (96 h)	Fish
	EC50	>10 - 100 mg/L (48 h)	Crustacean
	EC50	>10 - 100 mg/L (72 h)	Algae
Ethylbenzene CAS: 100-41-4	LC50	42.3 mg/L (96 h)	Pimephales promelas
	EC50	75 mg/L (48 h)	Daphnia magna
	EC50	63 mg/L (3 h)	Chlorella vulgaris
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	LC50	0.07 mg/L (96 h)	Oncorhynchus mykiss
	EC50	0.09 mg/L (96 h)	Mysidopsis bahia
	EC50	0.05 mg/L (72 h)	Scenedesmus subspicatus
propan-2-ol CAS: 67-63-0	LC50	9640 mg/L (96 h)	Pimephales promelas
	EC50	10000 mg/L (24 h)	Daphnia magna
	EC50	Not relevant	
2-methoxy-1-methylethyl acetate CAS: 108-65-6	LC50	161 mg/L (96 h)	Pimephales promelas
	EC50	481 mg/L (48 h)	Daphnia sp.
	EC50	Not relevant	
Diphenyl ether CAS: 101-84-8	LC50	>0.1 - 1 mg/L (96 h)	Fish
	EC50	>0.1 - 1 mg/L (48 h)	Crustacean
	EC50	>0.1 - 1 mg/L (72 h)	Algae

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	LC50	0.28 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	0.007 mg/L (48 h)	Acartia tonsa	Crustacean
	EC50	0.0199 mg/L (72 h)	Skeletonema costatum	Algae
methanol CAS: 67-56-1	LC50	15400 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	12000 mg/L (96 h)	Nitrocras spinipes	Crustacean
	EC50	530 mg/L (168 h)	Microcystis aeruginosa	Algae
Toluene CAS: 108-88-3	LC50	13 mg/L (96 h)	Carassius auratus	Fish
	EC50	11.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Not relevant		

Chronic toxicity:

Identification	Concentration		Species	Genus
Xylene CAS: 1330-20-7	NOEC	1.3 mg/L	Oncorhynchus mykiss	Fish
	NOEC	1.17 mg/L	Ceriodaphnia dubia	Crustacean
Ethylbenzene CAS: 100-41-4	NOEC	Not relevant		
	NOEC	0.96 mg/L	Ceriodaphnia dubia	Crustacean
2-methoxy-1-methylethyl acetate CAS: 108-65-6	NOEC	47.5 mg/L	Oryzias latipes	Fish
	NOEC	100 mg/L	Daphnia magna	Crustacean
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	NOEC	>0.001 - 0.01 mg/L		Fish
	NOEC	>0.001 - 0.01 mg/L		Crustacean
methanol CAS: 67-56-1	NOEC	15800 mg/L	Oryzias latipes	Fish
	NOEC	122 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides CAS: 61789-77-3 EC: 263-087-6	BOD5	Not relevant	Concentration	Not relevant
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	82 %
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9 EC: 246-807-3	BOD5	Not relevant	Concentration	10 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	88 %
Xylene CAS: 1330-20-7 EC: 215-535-7	BOD5	Not relevant	Concentration	Not relevant
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	88 %
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	BOD5	Not relevant	Concentration	100 mg/L
	COD	Not relevant	Period	14 days
	BOD5/COD	Not relevant	% Biodegradable	90 %
propan-2-ol CAS: 67-63-0 EC: 200-661-7	BOD5	1.19 g O2/g	Concentration	100 mg/L
	COD	2.23 g O2/g	Period	14 days
	BOD5/COD	0.53	% Biodegradable	86 %
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	BOD5	Not relevant	Concentration	785 mg/L
	COD	Not relevant	Period	8 days
	BOD5/COD	Not relevant	% Biodegradable	100 %
Diphenyl ether CAS: 101-84-8 EC: 202-981-2	BOD5	Not relevant	Concentration	5.6 mg/L
	COD	Not relevant	Period	20 days
	BOD5/COD	Not relevant	% Biodegradable	76 %
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	BOD5	Not relevant	Concentration	0.3 mg/L
	COD	Not relevant	Period	29 days
	BOD5/COD	Not relevant	% Biodegradable	38.8 %

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
methanol CAS: 67-56-1 EC: 200-659-6	BOD5	Not relevant	Concentration	100 mg/L
	COD	1.42 g O ₂ /g	Period	14 days
	BOD5/COD	Not relevant	% Biodegradable	92 %
Toluene CAS: 108-88-3 EC: 203-625-9	BOD5	2.5 g O ₂ /g	Concentration	100 mg/L
	COD	Not relevant	Period	14 days
	BOD5/COD	Not relevant	% Biodegradable	100 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Xylene CAS: 1330-20-7 EC: 215-535-7	BCF	9
	Pow Log	2.77
	Potential	Low
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	BCF	1
	Pow Log	3.15
	Potential	Low
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6 EC: 259-627-5	BCF	36
	Pow Log	2.4
	Potential	Moderate
propan-2-ol CAS: 67-63-0 EC: 200-661-7	BCF	3
	Pow Log	0.05
	Potential	Low
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	BCF	1
	Pow Log	0.43
	Potential	Low
Diphenyl ether CAS: 101-84-8 EC: 202-981-2	BCF	196
	Pow Log	4.21
	Potential	High
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Not relevant	BCF	54
	Pow Log	0.75
	Potential	Moderate
methanol CAS: 67-56-1 EC: 200-659-6	BCF	3
	Pow Log	-0.77
	Potential	Low
Toluene CAS: 108-88-3 EC: 203-625-9	BCF	90
	Pow Log	2.73
	Potential	Moderate

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2,2'-(octadec-9-enylimino)bisethanol (2 EO) CAS: 25307-17-9	Koc	Not relevant	Henry	Not relevant
	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	2.8E-2 N/m (25 °C)	Moist soil	Not relevant
Xylene CAS: 1330-20-7	Koc	202	Henry	524.86 Pa·m ³ /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Not relevant	Moist soil	Yes
Ethylbenzene CAS: 100-41-4	Koc	520	Henry	798.44 Pa·m ³ /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.859E-2 N/m (25 °C)	Moist soil	Yes
propan-2-ol CAS: 67-63-0	Koc	1.5	Henry	8.207E-1 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2.24E-2 N/m (25 °C)	Moist soil	Yes

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Diphenyl ether CAS: 101-84-8	Koc	1960	Henry	Not relevant
	Conclusion	Low	Dry soil	Not relevant
	Surface tension	1.753E-2 N/m (258.4 °C)	Moist soil	Not relevant
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	Koc	7.7	Henry	5E-3 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Not relevant
	Surface tension	Not relevant	Moist soil	Not relevant
methanol CAS: 67-56-1	Koc	Not relevant	Henry	Not relevant
	Conclusion	Not relevant	Dry soil	Not relevant
	Surface tension	2.355E-2 N/m (25 °C)	Moist soil	Not relevant
Toluene CAS: 108-88-3	Koc	178	Henry	672.8 Pa·m ³ /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.793E-2 N/m (25 °C)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class
	It is not possible to assign a specific code, as it depends on the intended use by the user	Non-hazardous

Type of waste:

Not available

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste (England & Wales) Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste (England & Wales) Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

- Substances listed in UK candidate list of substances of very high concern (SVHCs): *Octamethylcyclotetrasiloxane (556-67-2)* ; *Dodecamethylcyclohexasiloxane (540-97-6)* ; *Decamethylcyclopentasiloxane (541-02-6)* ; *Octamethylcyclotetrasiloxane (556-67-2)*
- Substances listed in UK REACH Authorisation List (Annex 14): Not relevant

Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Contains methanol. Shall not be placed on the market to the general public after 9 May 2019 in windscreen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight

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SECTION 15: REGULATORY INFORMATION (continued)**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.

Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits.

SECTION 16: OTHER INFORMATION**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Texts of the legislative phrases mentioned in section 2:

H412: Harmful to aquatic life with long lasting effects.

H372: Causes damage to organs through prolonged or repeated exposure (Inhalation).

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):

Acute Tox. 2: H310+H330 - Fatal in contact with skin or if inhaled.

Acute Tox. 3: H301 - Toxic if swallowed.

Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.

Acute Tox. 3: H331 - Toxic if inhaled.

Acute Tox. 4: H302 - Harmful if swallowed.

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.

Acute Tox. 4: H332 - Harmful if inhaled.

Aquatic Acute 1: H400 - Very toxic to aquatic life.

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

Eye Dam. 1: H318 - Causes serious eye damage.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Flam. Liq. 2: H225 - Highly flammable liquid and vapour.

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Repr. 2: H361d - Suspected of damaging the unborn child.

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1: H317 - May cause an allergic skin reaction.

Skin Sens. 1A: H317 - May cause an allergic skin reaction.

STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure (Inhalation).

STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Inhalation).

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

STOT SE 1: H370 - Causes damage to organs.

STOT SE 3: H335 - May cause respiratory irritation.

STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Aquatic Chronic 3: Calculation method

STOT RE 1: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

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SECTION 16: OTHER INFORMATION (continued)

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at UK, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -