


**Stage 2**

Date of compilation: 9/01/2023      Revised: 24/07/2023      Version: 2 (Replaced 1)

**SECTION 1: IDENTIFICATION**

- 1.1 Product identifier:** Stage 2
- Other means of identification:**  
Non-applicable
- 1.2 Recommended uses and any restrictions on use or supply:**  
Relevant uses: Water repeller; auxiliary product for the automotive; automotive applications. For professional users/industrial user only.  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Supplier's details:**  
GARDX INTERNATIONAL LTD  
LAKE HOUSE, 2 PORT WAY, PORT SOLENT,  
PO6 4TY PORTSMOUTH - UNITED KINGDOM  
Phone: +44 (0)1243 376426  
product@gardx.co.uk  
www.gardx.co.uk  
  
GardX New Zealand Limited  
739 Chapel Road,  
Howick,  
Auckland,  
New Zealand 2145  
  
0800 242 739
- 1.4 Emergency phone number:** PC No. 0800 764 766. CNN: 1012486. For 24/7 multilingual advice for spill, leak, fire, exposure or accident, call chemtrec @ +65 3163 8374 or + 64 9 801 0034

**SECTION 2: HAZARD IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**Hazardous Substances (Hazard Classification) Notice 2020.:**  
This product was classified in accordance with Hazardous Substances (Hazard Classification) Notice 2020.  
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411  
Flam. Liq. 3: Flammable liquids, Category 3, H226  
STOT RE 1: Specific target organ toxicity — Repeated exposure, Hazard Category 1 (Inhalation), H372  
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336
- 2.2 Label elements, including precautionary statements:**  
**Hazardous Substances (Hazard Classification) Notice 2020.:**  
Danger
- 
- Hazard statements:**  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.  
Flam. Liq. 3: H226 - Flammable liquid and vapour.  
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure (Inhalation).  
STOT SE 3: H336 - May cause drowsiness or dizziness.
- Precautionary statements:**  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
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.  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312: Call a POISON CENTER or doctor/physician if you feel unwell.  
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

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### SECTION 2: HAZARD IDENTIFICATION (continued)

**Substances that contribute to the classification**

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) (CAS: 64742-82-1) (10 - <30 %)

**2.3 Other hazards which do not result in classification:**

Non-applicable

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances:**

Non-applicable

**3.2 Mixtures:**

**Chemical description:** Wax/es

**Components:**

In accordance with Part B: Concentration cut-offs for ingredients in mixtures for purpose of section 3 of Consolidated Hazardous Substances (Safety Data Sheets) Notice 2017, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 64742-82-1	<b>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</b> Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT RE 1: H372; STOT SE 3: H336 - Danger	<b>10 - &lt;30 %</b>
CAS: 92704-41-1	<b>Kaolin, calcined</b>	<b>&lt;10 %</b>
CAS: 55406-53-6	<b>3-iodo-2-propynyl Butylcarbamate</b> Acute Tox. 4: H302+H332; Aquatic Acute 1: H400; Eye Dam. 1: H318; Skin Sens. 1: H317; STOT SE 3: H335 - Danger	<b>&lt;10 %</b>
CAS: 101-84-8	<b>Diphenyl ether</b> Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Eye Irrit. 2: H319 - Warning	<b>&lt;10 %</b>
CAS: 84-66-2	<b>Diethyl phthalate</b>	<b>&lt;10 %</b>
CAS: 55965-84-9	<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b> 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 - Danger	<b>&lt;10 %</b>

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

### SECTION 4: FIRST-AID MEASURES

**4.1 First aid instructions according to each relevant route of exposure;:**

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:**

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or shower the person affected if necessary thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

**By eye contact:**

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as 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, acute and delayed:**

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

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**SECTION 4: FIRST-AID MEASURES (continued)****4.3 Indication of medical attention and its urgency:**

Non-applicable

**SECTION 5: FIRE-FIGHTING MEASURES****5.1 Information on the appropriate type of extinguishers or fire-fighting agents:****Appropriate type of extinguishers or fire-fighting agents:**If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>).**Inappropriate type of extinguishers or fire-fighting agents:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

**5.2 Advice on specific hazards that may arise from the substance:**

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 Special protective equipment and precautions for fire-fighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. 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. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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 from accidental spills and release;**

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 Advice on how to contain and clean up a spill or release:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**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. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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

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### SECTION 7: HANDLING AND STORAGE (continued)

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems and with the minimum requirements for protecting the security and health of workers. Consult section 10 for conditions and materials that should be avoided.

**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.- Technical measures for storage**

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 Occupational exposure limits:**

Substances whose workplace exposure standards (WES) have to be monitored in the work environment:

Workplace exposure standards (WES) and biological exposure indices, Edition 12-1:

Identification	Occupational exposure limits		
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1	TWA	400 ppm	1600 mg/m <sup>3</sup>
	STEL		
Copper dinitrate CAS: 3251-23-8	TWA		0.01 mg/m <sup>3</sup>
	STEL		
Diphenyl ether CAS: 101-84-8	TWA	1 ppm	7 mg/m <sup>3</sup>
	STEL	2 ppm	14 mg/m <sup>3</sup>
Diethyl phthalate CAS: 84-66-2	TWA		5 mg/m <sup>3</sup>
	STEL		


**8.2 Engineering controls:**

**A.- Identification of the specific types of personal protective equipment**

In accordance with the order of importance to control professional exposure it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the professional exposure limits. In case of using individual protection equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

**B.- Respiratory protection**

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: A2)	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**

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**



Pictogram	PPE	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.1 mm, Conditions of use: Normal)	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

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**

Pictogram	PPE	Remarks
 Mandatory face protection	Face shield	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

**E.- Bodily protection**

Pictogram	PPE	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	Replace boots at any sign of deterioration.

**F.- Additional emergency measures**

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

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see 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:	Cream
Colour:	Yellowish
Odour:	Pleasant
Odour threshold:	Non-applicable *
<b>Volatility:</b>	
Initial boiling point and boiling range:	111 °C
Vapour pressure at 20 °C:	2219 Pa
Vapour pressure at 50 °C:	11724.54 Pa (11.72 kPa)
Evaporation rate at 20 °C:	Non-applicable *

\*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)

**Product description:**

Density at 20 °C:	Non-applicable *
Relative density at 20 °C:	0.95 - 0.97
Dynamic viscosity at 20 °C:	20000 - 30000 cP
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20.5 mm²/s
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Insoluble in water
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

**Flammability:**

Flash Point:	44 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	202 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available

**Particle characteristics:**

Median equivalent diameter:	Non-applicable
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**9.2 Other information:**

**Information with regard to physical hazard classes:**

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

**Other safety characteristics:**

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

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

### SECTION 10: STABILITY AND REACTIVITY

**10.1 Chemical 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 List of conditions to avoid or prevent a hazardous situation:**

Applicable for handling and storage at room temperature:

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### SECTION 10: STABILITY AND REACTIVITY (continued)

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

#### 10.5 Information on incompatible substances or 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 Information on 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 (CO<sub>2</sub>), 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 recommended by the occupational exposure limits, it may result in adverse effects on health 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: 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.

##### 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.

##### 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, as it does not 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:

Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

##### 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: 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.

##### H- Aspiration hazard:

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### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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:

Non-applicable

#### Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1	LD50 oral	>5100 mg/kg	Rat
	LD50 dermal	>3160 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L (4 h)	Rat
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	LD50 oral	1100 mg/kg	Rat
	LD50 dermal	2100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Diphenyl ether CAS: 101-84-8	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	7940 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	LD50 oral	64 mg/kg	Rat
	LD50 dermal	87.12 mg/kg	Rabbit
	LC50 inhalation	0.33 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

Toxic to aquatic life with long lasting effects.

#### 12.1 Ecotoxicity (aquatic and terrestrial):

##### 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
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	LC50 0.07 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50 0.09 mg/L (96 h)	Mysidopsis bahia	Crustacean
	EC50 0.05 mg/L (72 h)	Scenedesmus subspicatus	Algae
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
Diethyl phthalate CAS: 84-66-2	LC50 61 mg/L (48 h)	Leuciscus idus	Fish
	EC50 52 mg/L (48 h)	Daphnia magna	Crustacean
	EC50 Non-applicable		
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 >0.1 - 1 mg/L (96 h)		Fish
	EC50 >0.1 - 1 mg/L (48 h)		Crustacean
	EC50 >0.1 - 1 mg/L (72 h)		Algae

##### Chronic toxicity:

Identification	Concentration	Species	Genus
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	NOEC 0.0084 mg/L	Pimephales promelas	Fish
	NOEC 0.0499 mg/L	Daphnia magna	Crustacean
Diethyl phthalate CAS: 84-66-2	NOEC 5 mg/L	Cyprinus carpio	Fish
	NOEC 25 mg/L	Daphnia magna	Crustacean

#### 12.2 Persistence and degradability:

##### Substance-specific information:

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Degradability		Biodegradability	
Diphenyl ether CAS: 101-84-8	BOD5	Non-applicable	Concentration	5.6 mg/L
	COD	Non-applicable	Period	20 days
	BOD5/COD	Non-applicable	% Biodegradable	76 %
Diethyl phthalate CAS: 84-66-2	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	88 %

**12.3 Potential to be bioaccumulative:**

**Substance-specific information:**

Identification	Bioaccumulation potential	
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	BCF	36
	Pow Log	2.4
	Potential	Moderate
Diphenyl ether CAS: 101-84-8	BCF	196
	Pow Log	4.21
	Potential	High
Diethyl phthalate CAS: 84-66-2	BCF	117
	Pow Log	2.07
	Potential	High

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
Diphenyl ether CAS: 101-84-8	Koc	1960	Henry	Non-applicable
	Conclusion	Low	Dry soil	Non-applicable
	Surface tension	1.753E-2 N/m (258.4 °C)	Moist soil	Non-applicable
Diethyl phthalate CAS: 84-66-2	Koc	Non-applicable	Henry	6.181E-2 Pa·m <sup>3</sup> /mol
	Conclusion	Non-applicable	Dry soil	No
	Surface tension	3.699E-2 N/m (25 °C)	Moist soil	No

**12.5 Results of PBT and vPvB assessment:**

Non-applicable

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Appropriate and achievable disposal methods:**

**Special precautions to be taken during disposal:**

Consult the authorized waste service manager on the assessment and disposal operations. 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-dangerous residue. Waste should not be disposed of to drains. See epigraph 6.2.

**Regulations related to waste management:**

Legislation related to waste management:

Consolidated Imports and Exports (Restrictions) Prohibition Order (No 2) 2004  
Consolidated Hazardous Substances (Disposal) Notice 2017

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to NZS 5433.1:2012 Transport of dangerous goods on land

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**SECTION 14: TRANSPORT INFORMATION (continued)**


- 14.1 UN number:** UN1993  
**14.2 UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))  
**14.3 UN dangerous goods class and subsidiary risk:** 3  
 Labels: 3  
**14.4 UN Packing Group:** III  
**14.5 Environmental hazards:** Yes  
**14.6 Special precautions for user**  
 Physico-Chemical properties: see section 9  
  
**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 40-20:



- 14.1 UN number:** UN1993  
**14.2 UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))  
**14.3 UN dangerous goods class and subsidiary risk:** 3  
 Labels: 3  
**14.4 UN Packing Group:** III  
**14.5 Marine pollutant:** Yes  
**14.6 Special precautions for user**  
 Special regulations: 274, 223, 955  
 EmS Codes: F-E, S-E  
 Physico-Chemical properties: see section 9  
 Limited quantities: 5 L  
 Segregation group: Non-applicable  
**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2023:



- 14.1 UN number:** UN1993  
**14.2 UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))  
**14.3 UN dangerous goods class and subsidiary risk:** 3  
 Labels: 3  
**14.4 UN Packing Group:** III  
**14.5 Environmental hazards:** Yes  
**14.6 Special precautions for user**  
 Physico-Chemical properties: see section 9  
**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Non-applicable

**SECTION 15: REGULATORY INFORMATION**

- 15.1 Safety, health and environmental regulations specific for the product in question:**

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**SECTION 15: REGULATORY INFORMATION (continued)**

- Substances listed in the Montreal Protocol: Non-applicable
- Substances listed in the Rotterdam Convention: Non-applicable
- Substances listed in the Stockholm Convention: Non-applicable

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

**Relevant regulatory requirements:**

Health and Safety at Work (Hazardous Substances) Regulations 2017  
Health and Safety at Work Act 2015  
Consolidated Hazardous Substances (Labelling) Notice 2017  
Consolidated Hazardous Substances (Packaging) Notice 2017  
Consolidated Hazardous Substances (Hazardous Property Controls) Notice 2017  
Consolidated Hazardous Substances (Importers and Manufacturers) Notice 2015

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

This safety data sheet has been designed in accordance with Schedule: Content and format of safety data sheets (clause 7) of Consolidated Hazardous Substances (Safety Data Sheets) Notice 2017

**Texts of the legislative phrases mentioned in section 2:**

H336: May cause drowsiness or dizziness.  
H411: Toxic to aquatic life with long lasting effects.  
H372: Causes damage to organs through prolonged or repeated exposure (Inhalation).  
H226: Flammable liquid and vapour.

**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

**Hazardous Substances (Hazard Classification) Notice 2020.:**

Acute Tox. 2: H310+H330 - Fatal in contact with skin or if inhaled.  
Acute Tox. 3: H301 - Toxic if swallowed.  
Acute Tox. 4: H302+H332 - Harmful if swallowed or 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. 3: H226 - Flammable liquid and vapour.  
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.  
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 SE 3: H335 - May cause respiratory irritation.  
STOT SE 3: H336 - May cause drowsiness or dizziness.

**Advice related to training:**

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

**Principal bibliographical sources:**

<https://www.epa.govt.nz/>

**Abbreviations and acronyms:**

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**SECTION 16: OTHER INFORMATION (continued)**

HSNO Act: Hazardous substances and new organisms Act  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
CL50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon  
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, 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

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