

HSNO 2017 - New Zealand

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

1.1 Product identifier

Product name : Hempel's Crosslinker 98980
Product identity : 9898000000
Product type : crosslinker

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

Field of application : Used only as part of two- or multi component products.
Identified uses : Industrial applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : Hempel (Wattyl) New Zealand Limited
2-14 Patiki Road
Avondale, Auckland 1026
Tel.: 09 820 6700
Email: sales.nz@hempel.com

Date of Preparation : 24 April 2025
Date of previous issue : 15 October 2021.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

Poisons Centre New Zealand: 0800 764 766 (24 hour)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

GHS Classification

FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 3
ACUTE TOXICITY (inhalation) - Category 4
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 - Flammable liquid and vapor.
H301 - Toxic if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H351 - Suspected of causing cancer.
H361 - Suspected of damaging fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements :

General : Do not apply directly into or onto water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe the vapor, mist or spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

SECTION 2: Hazards identification

Response : Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Store locked up.

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

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%
<input checked="" type="checkbox"/> xylene	CAS: 1330-20-7	≥10 - ≤26
pentane-2,4-dione	CAS: 123-54-6	≤11
ethylbenzene	CAS: 100-41-4	≤9.3
tetraethyl silicate	CAS: 78-10-4	≤5
dibutyltin dilaurate	CAS: 77-58-7	≤3.8
toluene	CAS: 108-88-3	<1

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

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 and hence require reporting in this section.

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

Inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes.

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

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

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : Harmful if inhaled. May cause damage to organs following a single exposure if inhaled.

Skin contact : May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

Ingestion : May cause damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

SECTION 4: First aid measures

Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation :	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact :	Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion :	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO ₂ , powders, water spray. Not to be used: waterjet.
-----------------------	---

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is 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 oxides metal oxide/oxides

5.3 Advice for firefighters

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. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

SECTION 6: Accidental release measures

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

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

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) [xylene (o-, m-, p-isomers)] Ototoxicant. WES-TWA 8 hours: 50 ppm. WES-TWA 8 hours: 217 mg/m ³ .
pentane-2,4-dione	ACGIH TLV (United States, 1/2024) Absorbed through skin. TWA 8 hours: 25 ppm.
ethylbenzene	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) Absorbed through skin , Ototoxicant. WES-TWA 8 hours: 20 ppm. WES-TWA 8 hours: 88 mg/m ³ . WES-STEL 15 minutes: 176 mg/m ³ . WES-STEL 15 minutes: 40 ppm.
tetraethyl silicate	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) WES-TWA 8 hours: 10 ppm. WES-TWA 8 hours: 85 mg/m ³ .
dibutyltin dilaurate	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) [organic compounds including mono- and dimethyltin and n-butyltin: non-irritant compounds] Absorbed through skin. WES-TWA 8 hours: 0.05 mg/m ³ (as Sn). WES-STEL 15 minutes: 0.1 mg/m ³ (as Sn).
toluene	HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) [organic compounds including mono- and dimethyltin and n-butyltin: irritant compounds] Absorbed through skin. WES-STEL 15 minutes: 0.02 mg/m ³ (as Sn). WES-TWA 8 hours: 0.05 mg/m ³ (as Sn). HSWA 2015 - HSW (GRWM) 2016. Workplace exposure standards (WES) (New Zealand, 11/2023) Absorbed through skin , Ototoxicant. WES-TWA 8 hours: 20 ppm. WES-TWA 8 hours: 75 mg/m ³ . WES-STEL 15 minutes: 377 mg/m ³ .

SECTION 8: Exposure controls/personal protection

	WES-STEL 15 minutes: 100 ppm.
--	-------------------------------

Biological exposure indices

Product/ingredient name	Exposure limit values
xylene	HSWA 2015 - HSW (GRWM) 2016. Biological exposure indices (BEI) (New Zealand, 11/2023) [xylene] BEI: 1.5 g/l, methylhippuric acid [in urine]. Sampling time: end of shift.
ethylbenzene	HSWA 2015 - HSW (GRWM) 2016. Biological exposure indices (BEI) (New Zealand, 11/2023) BEI: 0.25 g/g creatinine, sum of mandelic acid and phenylglyoxylic acids [in urine]. Sampling time: end of shift or end of exposure.
toluene	HSWA 2015 - HSW (GRWM) 2016. Biological exposure indices (BEI) (New Zealand, 11/2023) BEI: 0.3 mg/g creatinine, o-cresol (following hydrolysis) [in urine]. Sampling time: end of shift or end of exposure. BEI: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift or end of exposure.

Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General :

Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.



Hygiene measures :

Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

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.

Hand protection :

Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, Viton®

May be used: polyvinyl alcohol (PVA), nitrile rubber (>0.3 mm), butyl rubber (>0.5 mm)

Short term exposure: neoprene rubber (>0.1 mm), natural rubber (latex) (>0.4 mm), polyvinyl chloride (PVC), nitrile rubber (>0.1 mm), butyl rubber (>0.3 mm)

Body protection :

Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection :

When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. (EN140) Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

SECTION 8: Exposure controls/personal protection

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

9.1 Information on basic physical and chemical properties

Physical state :	Liquid.
Color :	Clear.
Odor :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	Testing not relevant or not possible due to nature of the product.
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 28°C (82.4°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Vapor pressure :	Not applicable. [50°C (122°F)]
Vapor density :	Not available.
Specific gravity :	0.98 g/cm ³
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
Pentane-2,4-dione	340	644	

Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.
Explosive properties :	Testing not relevant or not possible due to nature of the product.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight :	Weighted average: 63 %
Water % by weight :	Weighted average: 0 %
VOC content :	53.4 g/l
TOC Content :	Weighted average: 361 g/l
Solvent Gas :	Weighted average: 0.204 m ³ /l

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.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.
 Reactive or incompatible with the following materials: reducing materials and acids.

SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Acute toxicity

Product/ingredient name	Result	Dose / Exposure	Effects
xylylene	Rabbit - Dermal - LD50	>4200 mg/kg	Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes
	Rat - Oral - LD50	3523 mg/kg	
	Rat - Inhalation - LC50 Vapor	6350 ppm [4 hours]	
	Rat - Inhalation - LC50 Gas.	5000 ppm [4 hours]	
pentane-2,4-dione	Rat - Oral - LD50	570 mg/kg	
	Rat - Dermal - LD50	790 mg/kg	
ethylbenzene	Rat - Inhalation - LC50 Vapor	5.1 mg/l [4 hours]	
	Rat - Oral - LD50	3500 mg/kg	
tetraethyl silicate	Rabbit - Dermal - LD50	>5000 mg/kg	Toxic effects: Lung, Thorax, or Respiration - Pleural effusion Kidney, Ureter, and Bladder - Interstitial nephritis Blood - Other hemolysis with or without anemia
	Rat - Oral - LD50	6270 mg/kg	
	Rabbit - Intravenous - LDLo	400 mg/kg	
dibutyltin dilaurate	Rabbit - Dermal - LD	>2 g/kg	Toxic effects: Gastrointestinal - Hypermotility, diarrhea Skin After systemic exposure - Dermatitis, other Gross Metabolite Changes - Weight loss or decreased weight gain
toluene	Rat - Oral - LD50	2071 mg/kg	
	Rat - Oral - LD50	636 mg/kg	
	Rat - Inhalation - LC50 Vapor	>20 mg/l [4 hours]	

Acute toxicity estimates

Route	ATE value
Oral	113.02 mg/kg
Dermal	2066.85 mg/kg
Inhalation (vapors)	33.34 mg/l
Inhalation (dusts and mists)	1.38 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
xylylene	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 5 milligrams Duration of treatment/exposure: 24 hours
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams Duration of treatment/exposure: 24 hours
pentane-2,4-dione	Rabbit - Skin - Irritant	Duration of treatment/ exposure: 6 hours	Amount/concentration applied: 20 mg
	Rabbit - Eyes - Severe irritant		Amount/concentration applied: 33.6 MI l
	Rabbit - Skin - Moderate irritant		Duration of treatment/exposure: 6 hours
ethylbenzene	Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 15 milligrams Duration of treatment/exposure: 24 hours
	Rabbit - Respiratory - Mild irritant		

SECTION 11: Toxicological information

tetraethyl silicate	Rabbit - Eyes - Mild irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams Duration of treatment/exposure: 24 hours
	Rabbit - Eyes - Mild irritant		
dibutyltin dilaurate	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams Duration of treatment/exposure: 24 hours
	Rabbit - Eyes - Moderate irritant		
toluene	Rabbit - Skin - Severe irritant	Duration of treatment/ exposure: 0.5 minutes	Amount/concentration applied: 100 milligrams Duration of treatment/exposure: 24 hours
	Rabbit - Eyes - Mild irritant		
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams Duration of treatment/exposure: 24 hours
			Amount/concentration applied: 100 mg Duration of treatment/exposure: 0.5 minutes
			Amount/concentration applied: 20 mg Duration of treatment/exposure: 24 hours

Sensitizer

No known data available in our database.

Mutagenic effects

No known data available in our database.

Carcinogenicity

No known data available in our database.

Reproductive toxicity

No known data available in our database.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Not available.			

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 2	-	-
pentane-2,4-dione	Category 2	-	-
ethylbenzene	Category 2	-	-
tetraethyl silicate	Category 2	-	-
dibutyltin dilaurate	Category 1	-	-
toluene	Category 2	-	-

Aspiration hazard

Product/ingredient name	Result
Not available.	

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

Other information :

No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Toxic to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
pentane-2,4-dione	Acute - LC50	Fish	104 mg/l [96 hours]
ethylbenzene	Acute - LC50 Chronic - NOEC - Fresh water	Fish Algae - Green algae - <i>Pseudokirchneriella subcapitata</i>	60.1 mg/l [96 hours] <1000 µg/l [96 hours]
tetraethyl silicate dibutyltin dilaurate	Acute - EC50 Chronic - EC10 - Fresh water	Daphnia Algae - Green algae - <i>Scenedesmus subspicatus</i>	>75 mg/l [48 hours] >0.5 mg/l [96 hours]
toluene	Acute - EC50 Chronic - NOEC - Fresh water Chronic - NOEC - Fresh water	Fish Daphnia - Water flea - <i>Daphnia magna</i> Algae - Green algae - <i>Pseudokirchneriella subcapitata</i>	3.1 mg/l [96 hours] 1000 µg/l [21 days] <500000 µg/l [96 hours]

12.2 Persistence and degradability

Product/ingredient name	Test	Result
xylylene	OECD Ready Biodegradability - Manometric Respirometry Test	>60% [28 days] - Readily 90 - 98% [28 days] - Readily
pentane-2,4-dione	OECD Ready Biodegradability - Modified MITI Test (I)	>80% [28 days] - Readily
ethylbenzene tetraethyl silicate toluene		>70% [28 days] - Readily 98% [28 days] - Readily 100% [14 days] - Readily

Product/ingredient name	Aquatic half-life	Photolysis
xylylene pentane-2,4-dione ethylbenzene tetraethyl silicate toluene		Readily Readily Readily Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
xylylene	3.12	8.1 - 25.9	Low
pentane-2,4-dione	0.68	-	Low
ethylbenzene	3.6	-	Low
tetraethyl silicate	3.18	-	Low
dibutyltin dilaurate	4.44	2.91	Low
toluene	2.73	90	Low

12.4 Mobility in soil

Product/ingredient name	logK _{oc}	K _{oc}
xylylene	1.59	39
pentane-2,4-dione	1.1	12.6222
ethylbenzene	2.23	170.406
tetraethyl silicate	1.72	52.828
toluene	2.07	117.115

Mobility : No known data available in our database.

Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods






The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar SHOULD be discarded in a fireproof container.

Packaging

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

SECTION 14: Transport information

Transport may take place according to national regulation NZS for transport by road and train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
NZS Class	UN1263	PAINT	3  	III	Yes.	<u>Hazchem code</u> ●3Y
IMDG Class	UN1263	PAINT. (dibutyltin dilaurate)	3  	III	Yes.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules</u> F-E, S-E
IATA Class	UN1263	PAINT	3 	III	Yes.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

PG* : Packing group

Env.* : Environmental hazards

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 applicable.


SECTION 15: Regulatory information

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

This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

HSNO Classification

 FLAMMABLE LIQUIDS - Category 3
 ACUTE TOXICITY (oral) - Category 3
 ACUTE TOXICITY (inhalation) - Category 4
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2
 CARCINOGENICITY - Category 2
 TOXIC TO REPRODUCTION - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 AQUATIC HAZARD (LONG-TERM) - Category 2

Safety, health and environmental regulations specific for the product :

No known specific national and/or regional regulations applicable to this product (including its ingredients).

HSNO Group Standard : HSR002665

HSNO Group Standard assigned are based upon the GHS Classification.

SECTION 16: Other information

📌 Indicates information that has changed from previously issued version.

Classification	Justification
📌 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 2	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.