

# SAFETY DATA SHEET

NONYELLOWING POLYISOCYANATE HARDENER FOR PU COATINGS  
AROMATIC FREE, 50%

TV4271

## Section 1. Identification

**Product name** : NONYELLOWING POLYISOCYANATE HARDENER FOR PU COATINGS  
AROMATIC FREE, 50%

**Product type** : Liquid.

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

<b>Supplier's details</b>	: WOOD FINISHING SUPPLIES LTD C/O CHEMFREIGHT 4 Bostock Place, East Tamaki, Auckland, New Zealand Phone: +64 9 2733949 Fax: +64 9 9749375 Mobile: +64 274 475656 www.wfsupplies.co.nz	<b>Manufacturer</b>	: SHERWIN-WILLIAMS Italy S.r.l. Via del Fiffò, 12 - 40065 Pianoro (BO) Italia - C.P. 18 Cod. Fisc. e Reg. Impr. Bo 08866930152  Sherwin-Williams Sweden AB Box 2016, SE-195 02 Marsta SWEDEN Fax: +46 (0)381 261 99 Tel: +46 (0)381 261 00 sweden.regulatory@sherwin.com
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**Emergency telephone number (with hours of operation)** : 0800 243 622 (Chemcall, Responsible Care NZ) 24 hrs./365 days

**e-mail address of person responsible for this SDS** : aaroni@wfsupplies.co.nz

## Section 2. Hazards identification

**HSNO Classification** :

- 3.1 - FLAMMABLE LIQUIDS - Category B
- 6.1 - ACUTE TOXICITY (oral) - Category E
- 6.1 - ACUTE TOXICITY (inhalation) - Category D
- 6.3 - SKIN IRRITATION - Category B
- 6.4 - EYE IRRITATION - Category A (Irritant)
- 6.5 - SENSITIZATION - Category A (Respiratory)
- 6.5 - SENSITIZATION - Category B (Skin)
- 6.7 - CARCINOGENICITY - Category B
- 6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE) - Category B
- 9.1 - AQUATIC ECOTOXICITY - Category D

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This product is classified as DANGEROUS GOODS for transport, according to the New Zealand Standard NZS 5433: 2012 Transport of Dangerous Goods on Land.

### GHS label elements

**Signal word** : Danger

**Hazard statements** :

- Highly flammable liquid and vapor.
- Harmful if inhaled.
- May be harmful if swallowed.
- Causes mild skin irritation.
- Causes serious eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- Suspected of causing cancer.
- May cause damage to organs.
- Harmful to aquatic life.

### Precautionary statements

**Version** : 7.01

**Date of issue/Date of revision** : 08, November, 2019  
SHW-A4-AP-HSN44-NZ

## Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. In case of inadequate ventilation wear respiratory protection. Keep away from ignition sources such as heat/sparks/open flame. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
- Response** : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash with plenty of soap and water. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Call a POISON CENTER or doctor/physician if exposed or you feel unwell. Get medical advice/attention. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
- Storage** : Store locked up. Store in cool/well-ventilated place.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Symbol** :



**Other hazards which do not result in classification** : Please refer to the SDS for additional information. Keep out of reach of children.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**
- Product code** : TV4271

Ingredient name	% (w/w)	CAS number
n-Butyl Acetate	37.7	123-86-4
Ethyl Acetate	29.0	141-78-6
Toluene Diisocyanate Polymer	19.7	9017-01-0
Methyl Ethyl Ketone	8.0	78-93-3
Hexamethylene Diisocyanate Polymer	5.4	28182-81-2
Toluene Diisocyanate	0.2	26471-62-5

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.

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

## **Section 4. First aid measures**

### Description of necessary first aid measures

- Inhalation** : Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Inhalation** : Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Ingestion** : May be harmful if swallowed.
- Skin contact** : Causes mild skin irritation. May cause an allergic skin reaction.
- Eye contact** : Causes serious eye irritation.

#### Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:  
wheezing and breathing difficulties  
asthma
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:  
irritation  
redness
- Eyes** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

### Indication of immediate medical attention and special treatment needed, if necessary

- Specific treatments** : Not available.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## **Section 4. First aid measures**

- 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.

See toxicological information (Section 11)

## **Section 5. Fire-fighting measures**

### **Extinguishing media**

- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

- Not suitable** : Do not use water jet.

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides

- Hazchem code** : Not available.

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## **Section 6. Accidental release measures**

- Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

- 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.

### **Methods and materials for containment and cleaning up**

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

- Large spill** : 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see

## Section 6. Accidental release measures

Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

**Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

<b>Ingredient name</b>	<b>Exposure limits</b>
n-Butyl Acetate	<b>NZ HSWA 2015 (New Zealand, 11/2017).</b> WES-TWA: 150 ppm 8 hours. WES-TWA: 713 mg/m <sup>3</sup> 8 hours. WES-STEL: 950 mg/m <sup>3</sup> 15 minutes. WES-STEL: 200 ppm 15 minutes.
Ethyl Acetate	<b>NZ HSWA 2015 (New Zealand, 11/2017).</b> WES-TWA: 200 ppm 8 hours. WES-TWA: 720 mg/m <sup>3</sup> 8 hours.
Methyl Ethyl Ketone	<b>NZ HSWA 2015 (New Zealand, 11/2017).</b> WES-TWA: 150 ppm 8 hours. WES-TWA: 445 mg/m <sup>3</sup> 8 hours. WES-STEL: 890 mg/m <sup>3</sup> 15 minutes. WES-STEL: 300 ppm 15 minutes.
Hexamethylene Diisocyanate Polymer	<b>NZ HSWA 2015 (New Zealand, 11/2017).</b> <b>Skin sensitizer.</b> WES-TWA: 0.02 mg/m <sup>3</sup> , (measured as -NCO) 8 hours. WES-STEL: 0.07 mg/m <sup>3</sup> , (measured as -NCO) 15 minutes.
Toluene Diisocyanate	<b>NZ HSWA 2015 (New Zealand, 6/2016).</b> <b>Skin sensitizer.</b> WES-TWA: 0.02 mg/m <sup>3</sup> , (measured as -



## **Section 8. Exposure controls/personal protection**

NCO) 8 hours.  
WES-STEL: 0.07 mg/m<sup>3</sup>, (measured as -  
NCO) 15 minutes.

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

## **Section 9. Physical and chemical properties**

### **Appearance**

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : 72°C (161.6°F)
- Flash point** : Closed cup: 7°C (44.6°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 5.6 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.

## **Section 9. Physical and chemical properties**

<b>Lower and upper explosive (flammable) limits</b>	: Lower: 1.38% Upper: 10.7%
<b>Vapor pressure</b>	: 12.1 kPa (90.6 mm Hg) [at 20°C]
<b>Vapor density</b>	: 2.48 [Air = 1]
<b>Relative density</b>	: 0.96
<b>Solubility</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C (104°F)): <0.205 cm <sup>2</sup> /s (<20.5 cSt)
<b><u>Aerosol product</u></b>	
<b>Type of aerosol</b>	: Not applicable.
<b>Heat of combustion</b>	: 28.488 kJ/g
<b>Ignition distance</b>	: Not applicable.
<b>Enclosed space ignition - Time equivalent</b>	: Not applicable.
<b>Enclosed space ignition - Deflagration density</b>	: Not applicable.
<b>Flame height</b>	: Not applicable.
<b>Flame duration</b>	: Not applicable.

## **Section 10. Stability and reactivity**

<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: 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. Do not allow vapor to accumulate in low or confined areas.
<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **Section 11. Toxicological information**

### **Information on the likely routes of exposure**

<b>Inhalation</b>	: Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Ingestion</b>	: May be harmful if swallowed.
<b>Skin contact</b>	: Causes mild skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	: Causes serious eye irritation.

### **Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation</b>	: Adverse symptoms may include the following: wheezing and breathing difficulties asthma
<b>Ingestion</b>	: No specific data.
<b>Skin contact</b>	: Adverse symptoms may include the following: irritation redness

## Section 11. Toxicological information

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

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Ethyl Acetate	LD50 Oral	Rat	5620 mg/kg	-
Methyl Ethyl Ketone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-
Hexamethylene Diisocyanate Polymer	LC50 Inhalation Vapor	Rat	18500 mg/m <sup>3</sup>	1 hours
Toluene Diisocyanate	LD50 Oral	Rat	4130 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Methyl Ethyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Hexamethylene Diisocyanate Polymer	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	500 milligrams	-
Toluene Diisocyanate	Skin - Severe irritant	Rabbit	-	500 milligrams	-

#### Sensitization

Not available.

#### Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Inhalation** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Eye contact** : No known significant effects or critical hazards.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

#### Chronic toxicity

Not available.

#### Carcinogenicity

Not available.



## Section 11. Toxicological information

### Mutagenicity

Not available.

### Teratogenicity

Not available.

### Reproductive toxicity

Not available.

### Specific target organ toxicity

Name	Category	Route of exposure	Target organs
Ethyl Acetate	Category B	Inhalation	Not determined
Methyl Ethyl Ketone	Category B	Inhalation	Not determined
Toluene Diisocyanate	Category A	Inhalation	Not determined

### Aspiration hazard

Not available.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	2712.24 mg/kg
Inhalation (vapors)	163.9 mg/l
Inhalation (dusts and mists)	3.19 mg/l

## Section 12. Ecological information

**Ecotoxicity** : This material is harmful to aquatic life.

### Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Ethyl Acetate	Acute EC50 2500000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 750000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 154000 µg/l Fresh water	Daphnia - Daphnia cucullata	48 hours
	Acute LC50 212500 µg/l Fresh water	Fish - Heteropneustes fossilis	96 hours
	Chronic NOEC 2400 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 75.6 mg/l Fresh water	Fish - Pimephales promelas - Embryo	32 days
Methyl Ethyl Ketone	Acute EC50 >500000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - Daphnia magna - Larvae	48 hours
	Acute LC50 3220000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

### Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
n-Butyl Acetate	-	-	Readily
Ethyl Acetate	-	-	Readily
Methyl Ethyl Ketone	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Ethyl Acetate	-	30	low
Hexamethylene Diisocyanate Polymer	-	367.7	low

## Section 12. Ecological information

### Mobility in soil







**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Marine Pollutant
<b>New Zealand Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		No.
<b>ADG Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		No.
<b>UN Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		No.
<b>ADR/RID Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		No.
<b>IATA Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		No.
<b>IMDG Class</b>	UN1263	PAINT RELATED MATERIAL	3	II		Not a pollutant.

### Additional information

**New Zealand Class** -  
**ADG Class** -  
**UN Class** -

## **Section 14. Transport information**

**ADR/RID Class** : **Special provisions** 640 (C)

**Tunnel code** D/E

**IATA Class** :

**IMDG Class** :

**Emergency schedules** F-E, S-E

PG\* : Packing group

**NZ NZS 14 Hazchem Code** : Not available.

**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.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## **Section 15. Regulatory information**

**HSNO Approval Number** : HSR002669

**HSNO Group Standard** : Surface coatings and colourants

**HSNO Classification** : 3.1 - FLAMMABLE LIQUIDS - Category B  
6.1 - ACUTE TOXICITY (oral) - Category E  
6.1 - ACUTE TOXICITY (inhalation) - Category D  
6.3 - SKIN IRRITATION - Category B  
6.4 - EYE IRRITATION - Category A (Irritant)  
6.5 - SENSITIZATION - Category A (Respiratory)  
6.5 - SENSITIZATION - Category B (Skin)  
6.7 - CARCINOGENICITY - Category B  
6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE) - Category B  
9.1 - AQUATIC ECOTOXICITY - Category D

**Safety, health and environmental regulations specific for the product** : No known specific national and/or regional regulations applicable to this product (including its ingredients).

### **International regulations**

#### **Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

#### **Montreal Protocol**

Not listed.

#### **Stockholm Convention on Persistent Organic Pollutants**

Not listed.

#### **Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

## Section 16. Other information

### History

**Date of printing** : 08, November, 2019.

**Date of issue/Date of revision** : 08, November, 2019

**Date of previous issue** : 12, July, 2019

**Version** : 7.01

**Key to abbreviations** : ADG = Australian Dangerous Goods  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
SGG = Segregation Group  
UN = United Nations

**References** : Not available.

📌 Indicates information that has changed from previously issued version.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

