

# SAFETY DATA SHEET

47-35 MS Hardener Fast

## Section 1. Identification

**Product identifier** : 47-35 MS Hardener Fast  
**Product type** : Liquid.

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

#### Identified uses

Use in coatings - Hardener.

### Supplier's details

**Manufacturer** : Valspar b.v.  
Zuiveringweg 89  
8243 PE Lelystad  
The Netherlands  
tel: +31 (0)320 292200  
fax: +31 (0)320 292201

**Emergency telephone number** : Call: +31 (0)320 292200 (during daytime)

**Supplier** : Valspar Automotive Australia Pty Limited  
Unit 11/8 Kerta Road  
Kincumber NSW 2251  
AUSTRALIA  
T: +612 43684054  
F: +612 43684215  
www.valsparautomotive.com.au

valspar

**Emergency telephone number** : Poisons Information Centre: Australia 131 126

## Section 2. Hazard(s) identification

**Classification of the substance or mixture** : Flam. Liq. 3, H226  
Skin Irrit. 2, H315  
Eye Irrit. 2, H319  
Skin Sens. 1, H317  
STOT SE 3, H335  
STOT SE 3, H336  
STOT RE 2, H373  
Asp. Tox. 1, H304  
Aquatic Chronic 3, H412

### GHS label elements

#### Hazard pictograms



**Signal word** : Danger

**Hazard statements** : Flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.

## Section 2. Hazard(s) identification

May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.

### Precautionary statements

- Prevention** : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapour or spray.
- Response** : IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- Storage** : Store in a well-ventilated place. Keep container tightly closed. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Not applicable.

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

## Section 3. Composition and ingredient information

**Substance/mixture** : Mixture

| Ingredient name            | % (w/w)   | CAS number |
|----------------------------|-----------|------------|
| n-butyl acetate            | ≥30 - ≤60 | 123-86-4   |
| Aliphatic polyisocyanate   | ≥30 - ≤50 | 28182-81-2 |
| xylene                     | ≥10 - ≤30 | 1330-20-7  |
| Aliphatic polyisocyanate 2 | ≥10 - ≤30 | 53880-05-0 |
| ethylbenzene               | ≤3        | 100-41-4   |
| ethyl acetate              | ≤3        | 141-78-6   |

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

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and 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.

## Section 4. First aid measures

**Ingestion** : Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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.

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

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

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

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

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

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

**Specific treatments** : No specific treatment.

**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. Firefighting measures

### Extinguishing media

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

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

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

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

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

**Hazchem code** : •3Y

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and material for containment and cleaning up

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

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not swallow. 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. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**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. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls and personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name            | Exposure limits  |
|----------------------------|--|
| n-butyl acetate            | <b>Safe Work Australia (Australia, 4/2018).</b><br>STEL: 950 mg/m <sup>3</sup> 15 minutes.<br>STEL: 200 ppm 15 minutes.<br>TWA: 713 mg/m <sup>3</sup> 8 hours.<br>TWA: 150 ppm 8 hours.  |
| Aliphatic polyisocyanate   | <b>Safe Work Australia (Australia, 4/2018).</b><br><b>Skin sensitiser.</b><br>STEL: 0.07 mg/m <sup>3</sup> , (as -NCO) 15 minutes.<br>TWA: 0.02 mg/m <sup>3</sup> , (as -NCO) 8 hours.   |
| xylene                     | <b>Safe Work Australia (Australia, 4/2018).</b><br>STEL: 655 mg/m <sup>3</sup> , 0 times per shift, 15 minutes.<br>STEL: 150 ppm, 0 times per shift, 15 minutes.<br>TWA: 350 mg/m <sup>3</sup> , 0 times per shift, 8 hours.<br>TWA: 80 ppm, 0 times per shift, 8 hours. |
| Aliphatic polyisocyanate 2 | <b>Safe Work Australia (Australia, 4/2018).</b><br><b>Skin sensitiser.</b><br>STEL: 0.07 mg/m <sup>3</sup> , (as -NCO) 15 minutes.<br>TWA: 0.02 mg/m <sup>3</sup> , (as -NCO) 8 hours.   |
| ethylbenzene               | <b>Safe Work Australia (Australia, 4/2018).</b><br>STEL: 543 mg/m <sup>3</sup> 15 minutes.<br>STEL: 125 ppm 15 minutes.<br>TWA: 434 mg/m <sup>3</sup> 8 hours.<br>TWA: 100 ppm 8 hours.  |

## Section 8. Exposure controls and personal protection

ethyl acetate

**Safe Work Australia (Australia, 4/2018).**TWA: 720 mg/m<sup>3</sup> 8 hours.

TWA: 200 ppm 8 hours.

STEL: 400 ppm 15 minutes.

STEL: 1440 mg/m<sup>3</sup> 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, vapour 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.
- 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. Recommended: If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Recommended EN 374 butyl rubber polyvinyl alcohol (PVA) Viton® ≥ 0.7 mm  
4 - 8 hours (breakthrough time): Recommended EN 374 neoprene ≥ 0.7 mm  
< 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (≥ 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: full-face mask supplied-air respirator

## Section 9. Physical and chemical properties

### Appearance

|   |   |
|---|---|
| <b>Physical state</b>                               | : Liquid.   |
| <b>Colour</b>                                       | : Colourless.   |
| <b>Odour</b>  | : Not available.  |
| <b>Odour threshold</b>                              | : Not available.  |
| <b>pH</b>   | : Not applicable.   |
| <b>Melting point</b>                                | : Not available.  |
| <b>Boiling point</b>                                | : 77°C (170.6°F)  |
| <b>Flash point</b>                                  | : Closed cup: 23°C (73.4°F)                                       |
| <b>Evaporation rate</b>                             | : Not available.  |
| <b>Flammability (solid, gas)</b>                    | : Not available.  |
| <b>Lower and upper explosive (flammable) limits</b> | : Lower: 2.2%<br>Upper: 11.5%                                     |
| <b>Vapour pressure</b>                              | : Not available.  |
| <b>Vapour density</b>                               | : 3.9 [Air = 1]   |
| <b>Relative density</b>                             | : 0.976   |
| <b>Solubility</b>                                   | : Insoluble in the following materials: cold water and hot water. |
| <b>Solubility in water</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)): 0.04 cm <sup>2</sup> /s (4 cSt)       |
| <b>Flow time (ISO 2431)</b>                         | : Not available.  |

## Section 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.  |
| <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 pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas. |
| <b>Incompatible materials</b>             | : Reactive or incompatible with the following materials:<br>oxidising 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 toxicological effects

#### Acute toxicity

## Section 11. Toxicological information

| Product/ingredient name    | Result                          | Species                  | Dose                  | Exposure |
|----------------------------|---------------------------------|--------------------------|-----------------------|----------|
| n-butyl acetate            | LC50 Inhalation Vapour          | Rat                      | >21.1 mg/l            | 4 hours  |
|                            | LD50 Dermal                     | Rabbit                   | >14112 mg/kg          | -        |
|                            | LD50 Oral                       | Rat                      | 10760 mg/kg           | -        |
| Aliphatic polyisocyanate   | LC50 Inhalation Dusts and mists | Rat                      | 2.18 mg/l             | 4 hours  |
|                            | LD50 Dermal                     | Rabbit - Male,<br>Female | >2000 mg/kg           | -        |
|                            | LD50 Dermal                     | Rat - Male,<br>Female    | >2000 mg/kg           | -        |
|                            | LD50 Oral                       | Rat                      | >5000 mg/kg           | -        |
| xylene                     | LC50 Inhalation Gas.            | Rat                      | 6350 ppm              | 4 hours  |
|                            | LD50 Dermal                     | Rabbit                   | 12126 mg/kg           | -        |
|                            | LD50 Oral                       | Rat                      | 3523 to 4000<br>mg/kg | -        |
| Aliphatic polyisocyanate 2 | LC50 Inhalation Dusts and mists | Rat                      | >5 mg/l               | 4 hours  |
|                            | LD50 Oral                       | Rat                      | >14000 mg/kg          | -        |
| ethylbenzene               | LC50 Inhalation Vapour          | Rat                      | 6350 ppm              | 4 hours  |
|                            | LD50 Dermal                     | Rabbit                   | 12126 mg/kg           | -        |
|                            | LD50 Oral                       | Rat                      | 3523 to 4000<br>mg/kg | -        |
| ethyl acetate              | LC50 Inhalation Vapour          | Rat                      | 1600 mg/l             | 4 hours  |
|                            | LD50 Dermal                     | Rabbit                   | >20000 mg/kg          | -        |
|                            | LD50 Oral                       | Rat                      | 5620 mg/kg            | -        |

### Irritation/Corrosion

| Product/ingredient name  | Result                   | Species | Score | Exposure                   | Observation |
|--------------------------|--------------------------|---------|-------|----------------------------|-------------|
| Aliphatic polyisocyanate | Skin - Mild irritant     | Rabbit  | -     | 4 hours                    | -           |
|                          | Eyes - Mild irritant     | Rabbit  | -     | -                          | -           |
| xylene                   | Skin - Mild irritant     | Rat     | -     | 8 hours 60<br>microliters  | -           |
|                          | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500<br>milligrams | -           |
|                          | Skin - Moderate irritant | Rabbit  | -     | 100 Percent                | -           |
|                          | Eyes - Mild irritant     | Rabbit  | -     | 87 milligrams              | -           |
|                          | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 5<br>milligrams   | -           |
| ethylbenzene             | Eyes - Severe irritant   | Rabbit  | -     | 500<br>milligrams          | -           |
|                          | Skin - Mild irritant     | Rabbit  | -     | 24 hours 15<br>milligrams  | -           |

### Sensitisation

| Product/ingredient name  | Route of exposure | Species             | Result                     |
|--------------------------|-------------------|---------------------|----------------------------|
| Aliphatic polyisocyanate | skin<br>skin      | Mouse<br>Guinea pig | Sensitising<br>Sensitising |

### Mutagenicity

| Product/ingredient name  | Test  | Experiment   | Result   |
|--------------------------|---|--|----------|
| Aliphatic polyisocyanate | OECD 471 Bacterial<br>Reverse Mutation Test               | Experiment: In vitro<br>Subject: Bacteria<br>Metabolic activation: +/-         | Negative |
|                          | OECD 476 In vitro<br>Mammalian Cell Gene<br>Mutation Test | Experiment: In vitro<br>Subject: Mammalian-Animal<br>Metabolic activation: +/- | Negative |

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.



## Section 11. Toxicological information

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

| Name                       | Category   | Route of exposure | Target organs                |
|----------------------------|------------|-------------------|------------------------------|
| n-butyl acetate            | Category 3 | -                 | Narcotic effects             |
| Aliphatic polyisocyanate   | Category 3 | -                 | Respiratory tract irritation |
| xylene                     | Category 3 | -                 | Respiratory tract irritation |
| Aliphatic polyisocyanate 2 | Category 3 | -                 | Respiratory tract irritation |
| ethyl acetate              | Category 3 | -                 | Narcotic effects             |

### Specific target organ toxicity (repeated exposure)

| Name   | Category   | Route of exposure | Target organs |
|--------|------------|-------------------|---------------|
| xylene | Category 2 | -                 | -             |

### Aspiration hazard

| Name         | Result                         |
|--------------|--------------------------------|
| xylene       | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |

**Information on likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

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

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

## Section 11. Toxicological information

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

| Product/ingredient name  | Result  | Species               | Dose                  | Exposure                    |
|--------------------------|---|-----------------------|-----------------------|-----------------------------|
| Aliphatic polyisocyanate | Sub-chronic NOAEL<br>Inhalation Dusts and mists | Rat - Male,<br>Female | 3.3 mg/m <sup>3</sup> | 90 days; 6 hours<br>per day |

**General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**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.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route                | ATE value      |
|----------------------|----------------|
| Dermal               | 10672.07 mg/kg |
| Inhalation (gases)   | 61606.94 ppm   |
| Inhalation (vapours) | 33.69 mg/l     |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name    | Result                  | Species                           | Exposure |
|----------------------------|-------------------------|-----------------------------------|----------|
| n-butyl acetate            | Acute EC50 397 mg/l     | Algae - Selenastrum capricornutum | 72 hours |
| Aliphatic polyisocyanate   | Acute EC50 44 mg/l      | Daphnia - Daphnia magna           | 48 hours |
|                            | Acute LC50 32 mg/l      | Crustaceans - Artemia salina      | 48 hours |
|                            | Acute LC50 18 mg/l      | Fish - Pimephales promelas        | 96 hours |
|                            | Acute NOEC 200 mg/l     | Algae                             | 72 hours |
|                            | Acute EC50 >1000 mg/l   | Algae - Scenedesmus subspicatus   | 72 hours |
| xylene                     | Acute EC50 >100 mg/l    | Daphnia - Daphnia magna           | 48 hours |
|                            | Acute LC50 >100 mg/l    | Fish - Danio rerio                | 96 hours |
|                            | Acute EC50 1 to 10 mg/l | Algae                             | 72 hours |
| Aliphatic polyisocyanate 2 | Acute EC50 1 to 10 mg/l | Daphnia - Daphnia magna           | 48 hours |
|                            | Acute LC50 1 to 10 mg/l | Fish                              | 96 hours |
|                            | Acute EC50 >100 mg/l    | Daphnia                           | 48 hours |
|                            | Acute EC50 >100 mg/l    | Fish                              | 96 hours |
| ethylbenzene               | Acute LC50 >10 mg/l     | Fish - Pimephales promelas        | 96 hours |
|                            | Acute EC50 165 mg/l     | Daphnia - Daphnia Magna           | 48 hours |
| ethyl acetate              | Acute LC50 230 mg/l     | Fish - Pimephales Promelas        | 96 hours |
|                            | Acute NOEC >100 mg/l    | Algae - Desmodesmus subspicatus   | 72 hours |
|                            | Acute NOEC 2.4 mg/l     | Daphnia - Daphnia magna           | 21 days  |

## Section 12. Ecological information

### Persistence and degradability

| Product/ingredient name    | Test   | Result                      | Dose | Inoculum |
|----------------------------|--|-----------------------------|------|----------|
| n-butyl acetate            | OECD 301D<br>Ready<br>Biodegradability -<br>Closed Bottle<br>Test              | >80 % - 5 days              | -    | -        |
| Aliphatic polyisocyanate   | EU 67/548/EEC<br>ANNEX V, C.4.E.   | 1 % - Not readily - 28 days | -    | -        |
| Aliphatic polyisocyanate 2 | OECD 302C<br>Inherent<br>Biodegradability:<br>Modified MITI<br>Test (II)       | 5 % - 28 days               | -    | -        |
|                            | OECD 301F<br>Ready<br>Biodegradability -<br>Manometric<br>Respirometry<br>Test | 1 % - 28 days               | -    | -        |

| Product/ingredient name    | Aquatic half-life          | Photolysis | Biodegradability |
|----------------------------|----------------------------|------------|------------------|
| n-butyl acetate            | -                          | -          | Readily          |
| Aliphatic polyisocyanate   | Fresh water 7.7 days, 23°C | -          | Not readily      |
| Aliphatic polyisocyanate 2 | -                          | -          | Not readily      |

### Bioaccumulative potential

| Product/ingredient name  | LogP <sub>ow</sub> | BCF         | Potential |
|--------------------------|--------------------|-------------|-----------|
| n-butyl acetate          | 2.3                | -           | low       |
| Aliphatic polyisocyanate | 5.54               | 367.7       | low       |
| xylene                   | 3.12               | 8.1 to 25.9 | low       |
| ethylbenzene             | 3.6                | -           | low       |
| ethyl acetate            | 0.68               | 30          | low       |

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

## Section 14. Transport information

|                            | ADG  | ADR/RID  | IMDG  | IATA   |
|----------------------------|--|--|---|--|
| UN number                  | UN1263   | UN1263   | UN1263  | UN1263   |
| UN proper shipping name    | PAINT RELATED MATERIAL   | PAINT RELATED MATERIAL   | PAINT RELATED MATERIAL  | Paint related material   |
| Transport hazard class(es) | 3<br> | 3<br> | 3<br> | 3<br> |
| Packing group              | III  | III  | III   | III  |
| Environmental hazards      | No.  | No.  | No.   | No.  |

### Additional information

- ADG** : **Hazchem code** •3Y  
**Special provisions** 163, 223, 367
- ADR/RID** : **Hazard identification number** 30  
**Limited quantity** 5 L  
**Special provisions** 163, 640E, 650, 367  
**Tunnel code** (D/E)
- IMDG** : **Emergency schedules** F-E, \_S-E\_  
**Special provisions** 163, 223, 367, 955
- IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities - Passenger Aircraft: 10 L. Packaging instructions: Y344.  
**Special provisions** A3, A72, A192

**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 IMO instruments** : Not available.

## Section 15. Regulatory information

### Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

### 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

## Section 15. Regulatory information

Not listed.

### Inventory list

|                          |   |
|--------------------------|---|
| <b>Australia</b>         | : All components are listed or exempted.  |
| <b>Canada</b>            | : All components are listed or exempted.  |
| <b>China</b>             | : All components are listed or exempted.  |
| <b>Europe</b>            | : All components are listed or exempted.  |
| <b>Japan</b>             | : <b>Japan inventory (ENCS)</b> : All components are listed or exempted.<br><b>Japan inventory (ISHL)</b> : Not determined. |
| <b>Malaysia</b>          | : Not determined  |
| <b>New Zealand</b>       | : All components are listed or exempted.  |
| <b>Philippines</b>       | : All components are listed or exempted.  |
| <b>Republic of Korea</b> | : All components are listed or exempted.  |
| <b>Taiwan</b>            | : All components are listed or exempted.  |
| <b>Thailand</b>          | : Not determined.   |
| <b>Turkey</b>            | : Not determined.   |
| <b>United States</b>     | : Not determined.   |
| <b>Viet Nam</b>          | : Not determined.   |

## Section 16. Any other relevant information

### History

|                                       |  |
|---------------------------------------|--|
| <b>Date of printing</b>               | : 12/18/2020   |
| <b>Date of issue/Date of revision</b> | : 12/18/2020   |
| <b>Date of previous issue</b>         | : No previous validation   |
| <b>Version</b>                        | : 1  |
| <b>Key to abbreviations</b>           | : ADG = Australian Dangerous Goods<br>ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road<br>ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>SUSMP = Standard Uniform Schedule of Medicine and Poisons<br>UN = United Nations |

### Procedure used to derive the classification

| Classification   | Justification         |
|--|-----------------------|
| FLAMMABLE LIQUIDS - Category 3   | On basis of test data |
| SKIN CORROSION/IRRITATION - Category 2   | Calculation method    |
| SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A  | Calculation method    |
| SKIN SENSITISATION - Category 1  | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3             | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2                              | Calculation method    |
| ASPIRATION HAZARD - Category 1   | Calculation method    |

**References** : Not available.

🔍 Indicates information that has changed from previously issued version.

## Section 16. Any other relevant information

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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.