SAFETY DATA SHEET

Date of issue  :  29 April 2021
Version  :  13

Section 1. Identification

Product code          :  10100-BHARD/4L
Product name          :  AMERLOCK SEALER HARDENER
Product type          :  Liquid.
Recommended use and restrictions
Use of the substance/mixture          :  Coating.
Uses advised against          :  Not applicable.

Supplier's details          :  PPG INDUSTRIES NEW ZEALAND LTD
                          5 MONAHAN ROAD, MT WELLINGTON,
                          AUCKLAND
                          www.ppgnz.co.nz

Telephone Numbers:
09 573 1620, 0800 659378
021 940 920 (24 Hours)

Emergency telephone number (with hours of operation) : New Zealand 0800 000 096 (24 hours) / Australia 1800 883 254 (24 hours)
For international shipping emergencies:  1-412-391-1618

e-mail address of person responsible for this SDS : ehsnz@ppg.com

Section 2. Hazards identification

HSNO Classification

6.1 - FLAMMABLE LIQUIDS - Category D
6.1 - ACUTE TOXICITY (oral) - Category D
6.1 - ACUTE TOXICITY (dermal) - Category E
6.1 - ACUTE TOXICITY (inhalation) - Category B
8.2 - CORROSIVE TO DERMAL TISSUE - Category C
8.3 - CORROSIVE TO OCULAR TISSUE - Category A
6.5 - SENSITIZATION - Category B (Skin)
6.8 - REPRODUCTIVE AND DEVELOPMENTAL TOXICITY - Category B
6.9 - SPECIFIC TARGET ORGAN TOXICITY (SINGLE OR REPEATED EXPOSURE) - Category B
9.1 - AQUATIC ECOTOXICITY - Category B
9.2 - SOIL ECOTOXICITY - Category C
9.3 - TERRESTRIAL VERTEBRATE ECOTOXICITY - Category C

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and has been classified according to the Hazardous Substances (Classifications) Notice 2017.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Land Transport Rule: Dangerous Goods 2005.

GHS label elements

Signal word : Danger
Section 2. Hazards identification

Hazard statements:
Combustible liquid.
Harmful if swallowed.
May be harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Fatal if inhaled.
Suspected of damaging fertility or the unborn child.
May cause damage to organs.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.
Harmful to the soil environment.
Harmful to terrestrial vertebrates.

Precautionary statements

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. Wear protective clothing. Wear respiratory protection. Keep away from flames and hot surfaces. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapour. 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:
Collect spillage. Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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 victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.

Storage:
Store locked up. Store in a well-ventilated place. Keep cool.

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:
Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture:
Mixture

CAS number/other identifiers:
Product code:
10100-BHARD/4L
Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>furfuryl alcohol</td>
<td>10 - &lt;30</td>
<td>98-00-0</td>
</tr>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], α-(2-amino(methyl-1,2-ethanediyl)-ω-(2-aminomethyl(2-ethylhexyl))-</td>
<td>10 - &lt;30</td>
<td>9046-10-0 (n = 2-6)</td>
</tr>
<tr>
<td>Polyaminoamide</td>
<td>10 - &lt;30</td>
<td>88082-29-1</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>1 - &lt;10</td>
<td>100-51-6</td>
</tr>
<tr>
<td>Formaldehyde, polymer with benzenamine, hydrogenated</td>
<td>1 - &lt;10</td>
<td>135108-88-2</td>
</tr>
<tr>
<td>2,4,6-tris(dimethylaminomethyl)phenol</td>
<td>1 - &lt;10</td>
<td>90-72-2</td>
</tr>
<tr>
<td>nonylphenol</td>
<td>1 - &lt;10</td>
<td>25154-52-3</td>
</tr>
<tr>
<td>3,6-diazaoctanethylenediamin</td>
<td>1 - &lt;10</td>
<td>112-24-3</td>
</tr>
<tr>
<td>salicylic acid</td>
<td>1 - &lt;10</td>
<td>69-72-7</td>
</tr>
<tr>
<td>4,4'-methylenebis(cyclohexylamine)</td>
<td>1 - &lt;10</td>
<td>1761-71-3</td>
</tr>
<tr>
<td>toluene</td>
<td>&lt;1</td>
<td>108-88-3</td>
</tr>
</tbody>
</table>

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 or have an OEL 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: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

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

Ingestion: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: Causes serious eye damage.

Inhalation: Fatal if inhaled.

Skin contact: Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.

Ingestion: Harmful if swallowed. Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

Eyes: Adverse symptoms may include the following:
  - pain
  - watering
  - redness

Inhalation: Adverse symptoms may include the following:
  - reduced foetal weight
  - increase in foetal deaths
  - skeletal malformations
## Section 4. First aid measures

<table>
<thead>
<tr>
<th>Skin</th>
<th>Protection of first-aiders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse symptoms may include the following:</td>
<td>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.</td>
</tr>
<tr>
<td>pain or irritation</td>
<td></td>
</tr>
<tr>
<td>redness</td>
<td></td>
</tr>
<tr>
<td>dryness</td>
<td></td>
</tr>
<tr>
<td>cracking</td>
<td></td>
</tr>
<tr>
<td>blistering may occur</td>
<td></td>
</tr>
<tr>
<td>reduced foetal weight</td>
<td></td>
</tr>
<tr>
<td>increase in foetal deaths</td>
<td></td>
</tr>
<tr>
<td>skeletal malformations</td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td>Notes to physician</td>
</tr>
<tr>
<td>Adverse symptoms may include the following:</td>
<td>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.</td>
</tr>
<tr>
<td>stomach pains</td>
<td></td>
</tr>
<tr>
<td>reduced foetal weight</td>
<td></td>
</tr>
<tr>
<td>increase in foetal deaths</td>
<td></td>
</tr>
<tr>
<td>skeletal malformations</td>
<td></td>
</tr>
</tbody>
</table>

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

- **Specific treatments**: Not available.
- **Notes to physician**: Use dry chemical, CO₂, water spray (fog) or foam.
- **Protection of first-aiders**: 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.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### Extinguishing media

- **Suitable**: Use dry chemical, CO₂, water spray (fog) or foam.
- **Not suitable**: Do not use water jet.

### Specific hazards arising from the chemical

- Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. 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 thermal decomposition products

- Decomposition products may include the following materials: carbon oxides, nitrogen oxides.

### Special precautions 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. 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour 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 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and material 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 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). 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 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: 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 should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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 earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 35°C (32 to 95°F). 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 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/personal protection

Control parameters

Ingredient name | Exposure limits
--- | ---

| furfuryl alcohol | NZ HSWA 2015 (New Zealand, 11/2019). Absorbed through skin. WES-STEL: 60 mg/m³ 15 minutes. WES-STEL: 15 ppm 15 minutes. WES-TWA: 40 mg/m³ 8 hours. WES-TWA: 10 ppm 8 hours. |

| toluene | NZ HSWA 2015 (New Zealand, 11/2019). Absorbed through skin. WES-TWA: 188 mg/m³ 8 hours. WES-TWA: 50 ppm 8 hours. |

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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.

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.
Section 8. Exposure controls/personal protection

Respiratory protection: 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 workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

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.

Gloves: nitrile neoprene
Eye protection: Chemical splash goggles and face shield.
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.

Section 9. Physical and chemical properties

Appearance
Physical state: Liquid.
Colour: Colourless.
Odour: Amine-like.
Odour threshold: Not available.
pH: Not applicable.

Melting point: Not available.
Boiling point: >37.78°C (>100°F)
Flash point: Closed cup: 91°C (195.8°F)

Flammability (solid, gas): Not available.
Lower and upper explosive (flammable) limits: Not available.

Vapour pressure: Not available.
Relative density: 1.02
Solubility: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water: Not applicable.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
Viscosity: Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)
Section 10. Stability and reactivity

Stability : The product may not be stable under certain conditions of storage or use.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : 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.

Incompatible materials : Reactive or incompatible with the following materials:
oxidising materials
strong acids
strong alkalis

Hazardous decomposition products : Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides

Hazardous polymerisation : Under normal conditions of storage and use, hazardous polymerisation will not occur.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation : Fatal if inhaled.
Ingestion : Harmful if swallowed. Corrosive to the digestive tract. Causes burns.
Skin contact : Causes severe burns. May be harmful in contact with skin. Defatting to the skin. May cause an allergic skin reaction.
Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
stomach pains
reduced foetal weight
increase in foetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
dryness
cracking
blistering may occur
reduced foetal weight
increase in foetal deaths
skeletal malformations

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

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

Acute toxicity
Section 11. Toxicological information

### Toxicological Information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>furfuryl alcohol</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>934 mg/m³</td>
<td>4 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>400 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethyl-ethoxy)-</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>0.132 g/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>233 ppm</td>
<td>4 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>3825 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rabbit</td>
<td>2980 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2,4,6-tris (dimethylaminomethyl) phenol</td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>2885 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>nonylphenol</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2.14 g/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3,6-diazaoctanethylenediamin</td>
<td>LD50 Oral</td>
<td>Rabbit</td>
<td>580 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>salicylic acid</td>
<td>LD50 Oral</td>
<td>Rabbit</td>
<td>1465 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>4,4’-methylenebis (cyclohexylamine)</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1716 mg/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>toluene</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>49 g/m³</td>
<td>4 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>8.39 g/kg</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>5580 mg/kg</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: There are no data available on the mixture itself.

### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4,6-tris (dimethylaminomethyl) phenol</td>
<td>Skin - Visible necrosis</td>
<td>Rabbit</td>
<td>-</td>
<td>4 hours</td>
<td>7 days</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: There are no data available on the mixture itself.

### Sensitisation

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde, polymer with benzenamine, hydrogenated</td>
<td>skin</td>
<td>Guinea pig</td>
<td>Sensitising</td>
</tr>
<tr>
<td>2,4,6-tris (dimethylaminomethyl) phenol</td>
<td>skin</td>
<td>Guinea pig</td>
<td>Sensitising</td>
</tr>
<tr>
<td>3,6-diazaoctanethylenediamin</td>
<td>skin</td>
<td>Guinea pig</td>
<td>Sensitising</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**

New Zealand
Section 11. Toxicological information

Skin : There are no data available on the mixture itself.
Respiratory : There are no data available on the mixture itself.

Potential chronic health effects

General : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Skin contact : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : Not available.
Teratogenicity : Suspected of damaging the unborn child.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : Suspected of damaging fertility.

Chronic toxicity

Not available.

Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde, polymer with benzenamine, hydrogenated 3,6-diazaoc</td>
<td>Category B</td>
<td>Oral</td>
<td>kidneys</td>
</tr>
<tr>
<td>tolanethylenediamin</td>
<td></td>
<td>Oral</td>
<td>Not determined</td>
</tr>
<tr>
<td>4,4’-methylenebis(cyclohexylamine) toluene</td>
<td>Category B</td>
<td>Skin</td>
<td>Not determined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation</td>
<td>Not determined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oral</td>
<td>Not determined</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalation</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>1338.36 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>3488.61 mg/kg</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td>51.04 mg/l</td>
</tr>
<tr>
<td>Inhalation (dusts and mists)</td>
<td>0.49 mg/l</td>
</tr>
</tbody>
</table>

Other information
Section 11. Toxicological information

Causes digestive tract burns. Prolonged or repeated contact may dry skin and cause irritation. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapour/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Section 12. Ecological information

Ecotoxicity: This material is toxic to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethylene)ω-(2-aminomethylethoxy)-</td>
<td>EC50 15 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td>Formaldehyde, polymer with benzenamine, hydrogenated 2,4,6-tris(dimethylaminomethyl)phenol nonylphenol</td>
<td>Acute EC50 63 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 175 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC0 0.056 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic EC10 0.003 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 1 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 1147.57 mg/l Fresh water</td>
<td>Daphnia - Daphnia longispina - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 5.6 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>21 days</td>
</tr>
</tbody>
</table>

Persistence/degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], α-(2-aminomethylethylene)ω-(2-aminomethylethoxy)-</td>
<td>-</td>
<td>-</td>
<td>Not readily</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>toluene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furfuryl alcohol</td>
<td>0.28</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>1.1</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Formaldehyde, polymer with benzenamine, hydrogenated nonylphenol</td>
<td>-</td>
<td>209 to 219</td>
<td>low</td>
</tr>
<tr>
<td>3,6-diazaocantanethylenediamin salicylic acid toluene</td>
<td>3.28</td>
<td>154.88</td>
<td>low</td>
</tr>
<tr>
<td></td>
<td>-1.66 to -1.4</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td></td>
<td>2.26</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td></td>
<td>2.73</td>
<td>8.32</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K_{oc}): Not available.

Other adverse effects: No known significant effects or critical hazards.
Section 12. Ecological information
Do not allow to enter drains or watercourses.

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.

Not suitable: Do not allow to enter drains or watercourses.

The classification of the product may meet the criteria for a hazardous waste. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

<table>
<thead>
<tr>
<th></th>
<th>NZ</th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN3066</td>
<td>UN3066</td>
<td>UN3066</td>
<td>UN3066</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>PAINT</td>
<td>PAINT</td>
<td>PAINT</td>
<td>PAINT</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Marine pollutant substances</td>
<td>(nonylphenol, 4,4'-methylenebis(cyclohexylamine))</td>
<td>Not applicable.</td>
<td>(nonylphenol, 4,4'-methylenebis(cyclohexylamine))</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

Additional information

NZ: The marine pollutant mark is not required when transported by road or rail.
ADG: None identified.
Hazchem code: 2X
IMDG: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
14. Transport information

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.

Section 15. Regulatory information

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

HSNO Approval Number: HS002678 Toxic [6.1], Corrosive, Combustible

Emergency Management Regulations: Level 1: Labelling required when 5L is present in a workplace.

Level 2: MSDS required when any amount is present in a workplace. At least 2 x 4.5 kg powder fire extinguishers required when 500L is present in a workplace.

Level 3: Emergency Response Plans and Secondary Containment required when 1000L is stored.

Flammable Signage required when 10000L is present in a workplace.

Toxic Signage required when 250L or 250kg is present in a workplace.

Corrosive Signage required when 1000L is present in a workplace.

Ecotoxic Signage required when 1000L is present in a workplace.

Approved Handler: Yes - For any quantity.

Section 16. Other information

Date of issue: 29 April 2021

Indicates information that has changed from previously issued version.

Key to abbreviations: STEL = Short Term Exposure Limit

TWA = Time-Weighted Average

WES = Work Exposure Standard

References: Not available.

Organisation that prepared the SDS: EHS

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.