Section 1. Identification

Product code: 2KBHARD/2L
Product identifier: AMERLOCK 2K HARDENER

Recommended use and restrictions

Use of the substance/mixture: Coating.
Uses advised against: Not applicable.

Supplier's details: PPG Industries Australia Pty Limited
(ABN 82 055 500 939)
14-20 McNaughton Rd
CLAYTON Victoria 3168
Tel: (03) 9263 6000 Fax: (03) 9263 6970

Emergency telephone number: Australia 1800 883 254 / New Zealand 0800 000 096
For international shipping emergencies: 1-412-391-1618

Section 2. Hazard(s) identification

Classification of the substance or mixture:
- FLAMMABLE LIQUIDS - Category 3
- SKIN CORROSION/IRRITATION - Category 1B
- SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
- SKIN SENSITISATION - Category 1
- REPRODUCTIVE TOXICITY (Fertility) - Category 2
- REPRODUCTIVE TOXICITY (Unborn child) - Category 2

GHS label elements

Hazard pictograms:

Signal word: DANGER

Hazard statements:
- Flammable liquid and vapour.
- Causes severe skin burns and eye damage.
- May cause an allergic skin reaction.
- Suspected of damaging fertility or the unborn child.

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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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. Avoid breathing vapour. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Section 2. Hazard(s) identification

Response: IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

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.

Supplemental label elements: Not applicable.

Other hazards which do not result in classification: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition and ingredient information

Substance/mixture: Mixture

CAS number/other identifiers:
- CAS number: Not applicable.
- EC number: Mixture.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>% (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>10 - &lt;30</td>
</tr>
<tr>
<td>nonylphenol</td>
<td>25154-52-3</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>n-phenylenebis(methylamine)</td>
<td>1477-55-0</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>4-tert-butylphenol</td>
<td>98-54-4</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>Polyaminoamide</td>
<td>68082-29-1</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine</td>
<td>68082-29-1</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>100-51-6</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>2,4,6-tris(dimethyaminomethyl)phenol</td>
<td>90-72-2</td>
<td>1 - &lt;10</td>
</tr>
<tr>
<td>Fatty acids, tall-oil, reaction products with tetraethylenepentamine</td>
<td>68953-36-6</td>
<td>1 - &lt;10</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.

SUB codes represent substances without registered CAS Numbers.

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.
## Section 4. First aid measures

### 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**
No known significant effects or critical hazards.

**Skin contact**
Causes severe burns. Defatting to the skin. May cause an allergic skin reaction.

**Ingestion**
No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact**
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

**Skin contact**
Adverse symptoms may include the following:
- pain or irritation
- dryness
- redness
- blistering may occur
- cracking
- 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

### 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, CO₂, 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.

Hazardous thermal decomposition products
- Decomposition products may include the following materials:
  - carbon oxides
  - nitrogen oxides
  - sulfur oxides
  - metal oxide/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: •3W

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. Do not breathe 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 spill product. Note: see Section 1 for
Section 6. Accidental release measures

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). 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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. 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 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.

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 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. Store locked up. 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 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

xylene

Safe Work Australia (Australia, 4/2018).
STEL: 655 mg/m³ 15 minutes.
STEL: 150 ppm 15 minutes.
TWA: 350 mg/m³ 8 hours.
TWA: 80 ppm 8 hours.

m-phenylenebis(methylamine)

Safe Work Australia (Australia, 4/2018).
Absorbed through skin.
PEAK: 0.1 mg/m³

4-tert-butylphenol

DFG MAC-values list (Germany, 7/2018).
Absorbed through skin. Skin sensitiser.
PEAK: 1 mg/m³, 4 times per shift, 15 minutes.
Section 8. Exposure controls and personal protection

PEAK: 0.16 ppm, 4 times per shift, 15 minutes.  
TWA: 0.5 mg/m³ 8 hours.  
TWA: 0.08 ppm 8 hours.  

**benzyl alcohol**

*DFG MAC-values list (Germany, 7/2018).*  
*Absorbed through skin.*  
PEAK: 44 mg/m³, 4 times per shift, 15 minutes.  
PEAK: 10 ppm, 4 times per shift, 15 minutes.  
TWA: 22 mg/m³ 8 hours.  
TWA: 5 ppm 8 hours.  

**ethylbenzene**

*Safe Work Australia (Australia, 4/2018).*  
STEL: 543 mg/m³ 15 minutes.  
STEL: 125 ppm 15 minutes.  
TWA: 434 mg/m³ 8 hours.  
TWA: 100 ppm 8 hours.  

**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.

For products that are sprayed, where practicable use a spray booth designed and maintained in accordance with AS/NZS 4114.

**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**  
Chemical splash goggles and face shield.

**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.

**Gloves**  
butyl rubber

**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.
Section 8. Exposure controls and personal protection

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: 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.

Restrictions on use: Not applicable.

References: Eye protectors should conform to AS/NZS 1336 and AS/NZS 1337. Chemical-resistant gloves should conform to AS/NZS 2161.1. Respiratory protection should conform to AS/NZS 1715 and AS/NZS 1716. Occupational footwear should conform to AS/NZS 2210.

Section 9. Physical and chemical properties

Appearance
- Physical state: Liquid.
- Colour: Colourless.
- Odour: Amine-like.
- Odour threshold: Not available.
- pH: Not available.
- Melting point: Not available.
- Boiling point: >37.78°C (>100°F)
- Flash point: Closed cup: 32°C (89.6°F)
- Evaporation rate: Not available.
- Flammability (solid, gas): Not available.
- Lower and upper explosive (flammable) limits: Not available.
- Vapour pressure: Not available.
- Vapour density: Not available.
- Relative density: 1.42
- Solubility: Insoluble in the following materials: cold water.
- Partition coefficient: n-octanol/water: Not available.
- Auto-ignition temperature: Not available.
- Decomposition temperature: Not available.
- Viscosity: Not Applicable

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Section 10. Stability and reactivity

**Conditions to avoid**
Stable under recommended storage and handling conditions (see Section 7). When exposed to high temperatures may produce hazardous decomposition products.

**Incompatible materials**
Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

**Hazardous decomposition products**
Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides metal oxide/oxides.

Section 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;1.7 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4.3 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>nonylphenol</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2.14 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>580 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>m-phenylenebis (methylamine)</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>700 ppm</td>
<td>1 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat - Male, Female</td>
<td>&gt;3100 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>4-tert-butyphenol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>930 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2.29 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2.95 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat</td>
<td>&gt;4178 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1.23 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>17.8 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>17.8 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3.5 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>2,4,6-tris (dimethylaminomethyl) phenol</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1.28 g/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>1280 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1200 mg/kg</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>xylene</td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 hours</td>
<td>4 hours</td>
</tr>
<tr>
<td>m-phenylenebis (methylamine)</td>
<td>Skin - Severe irritant</td>
<td>Rat</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine</td>
<td>Skin - Irritant</td>
<td>Human</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2,4,6-tris (dimethylaminomethyl) phenol</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Visible necrosis</td>
<td>Rabbit</td>
<td>-</td>
<td>4 hours</td>
<td>7 days</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**
Section 11. Toxicological information

Skin
There are no data available on the mixture itself.

Eyes
There are no data available on the mixture itself.

Respiratory
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>m-phenylenebis(methylamine) Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine 2,4,6-tris(dimethylaminomethyl)phenol</td>
<td>skin</td>
<td>Mouse</td>
<td>Sensitising</td>
</tr>
<tr>
<td></td>
<td>skin</td>
<td>Mouse</td>
<td>Sensitising</td>
</tr>
<tr>
<td></td>
<td>skin</td>
<td>Guinea pig</td>
<td>Sensitising</td>
</tr>
</tbody>
</table>

Conclusion/Summary

Skin
There are no data available on the mixture itself.

Eyes
There are no data available on the mixture itself.

Respiratory
There are no data available on the mixture itself.

Mutagenicity
Not available.

Conclusion/Summary

Carcinogenicity
Not available.

Conclusion/Summary

Reproductive toxicity
Not available.

Conclusion/Summary

Teratogenicity
Not available.

Conclusion/Summary

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

Information on likely routes of exposure

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation: No known significant effects or critical hazards.

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

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: 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

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

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

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

Conclusion/Summary: There are no data available on the mixture itself. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Short term exposure

Potential immediate effects: There are no data available on the mixture itself.

Potential delayed effects: There are no data available on the mixture itself.
Section 11. Toxicological information

Long term exposure

Potential immediate effects: There are no data available on the mixture itself.

Potential delayed effects: There are no data available on the mixture itself.

Potential chronic health effects

Not available.

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. 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: Suspected of damaging the unborn child.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapours) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMERLOCK 2K HARDENER</td>
<td>4487.3</td>
<td>7238.7</td>
<td>105789.1</td>
<td>70</td>
<td>50.2</td>
</tr>
<tr>
<td>xylene</td>
<td>4300</td>
<td>1100</td>
<td>N/A</td>
<td>11</td>
<td>N/A</td>
</tr>
<tr>
<td>nonylphenol</td>
<td>580</td>
<td>2140</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>m-phenylenebis(methylamine)</td>
<td>930</td>
<td>N/A</td>
<td>4500</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4-tert-butlyphenol</td>
<td>2950</td>
<td>2290</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>1230</td>
<td>2000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>benzene, ethyl-</td>
<td>3500</td>
<td>17800</td>
<td>N/A</td>
<td>17.8</td>
<td>N/A</td>
</tr>
<tr>
<td>2,4,6-tris(dimethylaminomethyl)phenol</td>
<td>1200</td>
<td>1280</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Other information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains m-phenylenebis(methylamine), Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethyleneetramine, 2,4,6-tris(dimethylaminomethyl)phenol, Fatty acids, tall-oil, reaction products with tetraethylenepentamine, Amines, polyethylenepoly-, triethyleneetramine fraction, 3,6,9-triazaundecamethylene diamine.
Section 11. Toxicological information

May produce an allergic reaction.

Section 12. Ecological information

### Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>nonylphenol</td>
<td>Acute EC50 0.056 mg/l Fresh water</td>
<td>Algae - Scenedesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td>Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine ethylbenzene</td>
<td>Chronic EC10 0.003 mg/l Fresh water</td>
<td>Algae - Scenedesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 1 μg/l Fresh water EC10 1.78 mg/l</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 150 to 200 mg/l Fresh water</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 175 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

### Persistence and 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>xylene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine benzyl alcohol ethylbenzene</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>ethylbenzene</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
</tbody>
</table>

### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>3.16</td>
<td>7.4 to 18.5</td>
<td>low</td>
</tr>
<tr>
<td>nonylphenol</td>
<td>3.28</td>
<td>154.88</td>
<td>low</td>
</tr>
<tr>
<td>m-phenylenebis (methylamine)</td>
<td>0.18</td>
<td>2.69</td>
<td>low</td>
</tr>
<tr>
<td>4-tert-butylphenol</td>
<td>3.31</td>
<td>67.61</td>
<td>low</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>1.1</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>3.15</td>
<td>79.43</td>
<td>low</td>
</tr>
</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th></th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN3470</td>
<td>UN3470</td>
<td>UN3470</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>PAINT, CORROSIVE, FLAMMABLE</td>
<td>PAINT, CORROSIVE, FLAMMABLE</td>
<td>PAINT, CORROSIVE, FLAMMABLE</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8 (3)</td>
<td>8 (3)</td>
<td>8 (3)</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
<td>II</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Yes. The environmentally hazardous substance mark is not required.</td>
<td>Yes.</td>
<td>Yes. The environmentally hazardous substance mark is not required.</td>
</tr>
<tr>
<td>Marine pollutant substances</td>
<td>Not applicable.</td>
<td>(nonylphenol, 4-tert-butylphenol)</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

Additional information

- **ADG**: None identified.
- **Hazchem code**: 3W
- **IMDG**: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- **IATA**: The environmentally hazardous substance mark may appear if required by other transportation regulations.

**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 14. Transport information

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

Section 15. Regulatory information

**Standard Uniform Schedule of Medicine and Poisons**
Not regulated.

**SUSMP**

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

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>crystalline silica, respirable powder (&gt;10 microns)</td>
<td>Restricted hazardous chemical [For abrasive blasting at a concentration of greater than 1%]</td>
</tr>
</tbody>
</table>

**Australia inventory (AICS)**: All components are listed or exempted.

**New Zealand (NZIoC)**: All components are listed or exempted.

Section 16. Any other relevant information

**History**

Date of issue/Date of revision: 8 February 2020

Date of previous issue: 10/2/2019

Prepared by: EHS

Key to abbreviations:
- ADG = Australian Dangerous Goods
- 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
- NOHSC = National Occupational Health and Safety Commission
- SUSMP = Standard Uniform Schedule of Medicine and Poisons
- UN = United Nations

References: Not available.

* Indicates information that has changed from previously issued version.

**Notice to reader**

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.