

Safety Data Sheet

1. Identification

| | | |
|---------------------------|---|--------------------|
| 1.1 Product Name | BATHWORKS® DIY Refinishing Kit – Part B Base Hardener | |
| 1.2 Distributor | Munro Products | (716) 741-9450 |
| | 9150 Clarence Center Road | |
| | Clarence Center, NY 14032 | www.bath-works.net |
| 1.3 Emergency Information | CHEMTREC® | (800) 424-9300 |
| | Poison Control Center | (800) 854-6813 |

2. Hazard Identification

- 2.1. Classification of the substance or mixture
- Flam. Liq. 3; H226 Flammable liquid and vapor.
 - Skin Sens. 1; H317 May cause an allergic skin reaction.
 - Resp. Sens. 1; H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled.
 - Aquatic Chronic 3; H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

Using the Toxicity Data listed in section 11 & 12 the product is labelled as follows.



Danger

H226 Flammable liquid and vapor.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms of breathing difficulties if inhaled.

H412 Harmful to aquatic life with long lasting effects.

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P260 Do not breathe mist / vapors / spray.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P262 Do not get in eyes, on skin, or on clothing.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

P285 In case of inadequate ventilation wear respiratory protection.

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+352 IF ON SKIN: Wash with soap and water.

P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P331 Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: Get medical advice/attention.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.

P363 Wash contaminated clothing before reuse.

P370 In case of fire:.

P403+233 Store in a well ventilated place. Keep container tightly closed.

2.3 HMIS Rating

Health: 3

Flammability: 3

Reactivity: 0

3. Ingredient Composition

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|--|------------|---|--------|
| Hexamethylene diisocyanate homopolymer CAS Number: 0028182-81-2 | 75 - 100 | Skin Sens. 1;H317 | [1] |
| BUTYL ACETATE CAS Number: 0000123-86-4 | 1.0 - 10 | Flam. Liq. 3;H226 STOT SE 3;H336 | [1][2] |
| Petroleum naphtha CAS Number: 0064742-95-6 | 1.0 - 10 | Asp. Tox. 1;H304 Aquatic Chronic 2;H411 (Self Classification) | [1] |
| Hexamethylene diisocyanate CAS Number: 0000822-06-0 | 0.10 - 1.0 | Acute Tox. 3;H331 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317 | [1][2] |

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First Aid

4.1. Description of first aid measures

| | |
|------------|--|
| General | Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. |
| Eyes | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately. |
| Skin | In case of contact, immediately flush skin with soap and plenty of water. Get medical attention immediately. |
| Ingestion | If swallowed, immediately contact Poison Control Center at 1-800-854-6813. DO NOT induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------|---|
| Overview | NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Avoid contact with eyes, skin and clothing. May cause allergic respiratory reaction. |
| Inhalation | Harmful if inhaled. May cause lung injury. Causes nose and throat irritation. Vapors may affect the brain or nervous system causing dizziness, headache or nausea |
| Eyes | Causes severe eye irritation. Avoid contact with eyes |
| Skin | Causes skin irritation. May be harmful if absorbed through the skin |
| Ingestion | Harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea, or drowsiness. |
| Chronic effects | None known |

5. Firefighting

| | |
|--|--|
| 5.1. Extinguishing media | <p>CAUTION: This product has a very low flashpoint. Use of water spray when fighting fire may be inefficient.</p> <p>CAUTION: For mixtures containing alcohol or polar solvent, alcohol-resistant foam may be more effective.</p> <p>SMALL FIRES: Use dry chemical, CO₂, water spray or regular foam.</p> <p>LARGE FIRES: Use water spray, fog, or regular foam. Do not use straight streams. Move containers from fire area if you can do so without risk.</p> |
| 5.2. Special hazards arising from the substance or mixture | <p>HIGHLY FLAMMABLE MATERIALS: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) creating a vapor explosion hazard. Runoff to sewers may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water.</p> |
| 5.3. Advice for fire-fighters | <p>Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.</p> |
| 5.4. ERG Number | 128 |

6. Accidental Release

| | |
|--|---|
| 6.1. Personal precautions, protective equipment and emergency procedures | <p>ELIMINATE ALL IGNITION SOURCES (no smoking, flares, sparks or flames in immediate area). Use only non-sparking equipment to handle spilled material and absorbent. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to containers. Use non-sparking tools to collect absorbed material.</p> |
| 6.2. Environmental precautions | <p>Do not allow spills to enter drains or watercourses.</p> |
| 6.3. Methods and material for containment and cleaning up | <p>CALL CHEMTREC at (800)-424-9300 for emergency response. Isolate spill or leak area immediately for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. LARGE SPILLS: Consider initial downwind evacuation for at least 300 meters (1000 feet).</p> |

7. Handling & Storage

| | |
|---|--|
| 7.1. Precautions for safe handling | <p>Handling: Vapors may cause flash fire or ignite explosively.</p> <p>In Storage: Keep away from heat, sparks and flame</p> |
| 7.2. Conditions for safe storage, including any incompatibilities | <p>Store between 40-100F (4-38C).</p> <p>Avoid contact with eyes, skin and clothing.</p> <p>Strong oxidizing agents.</p> <p>Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone</p> |
| 7.3. Specific end use(s) | <p>Close container after each use.</p> <p>Wash thoroughly after handling.</p> <p>Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation.</p> |

8. Exposure Controls & Personal Protection

8.1. Control parameters

| CAS No. | Ingredient | Source | Value |
|---------|------------|--------|-------|
|---------|------------|--------|-------|

| | | | |
|--------------|---|--------------|--|
| 0000123-86-4 | BUTYL ACETATE | OSHA | 150 ppm TWA; 710 mg/m ³ TWA 200 ppm STEL; 950 mg/m ³ STEL |
| | | ACGIH | 150 ppm TWA 200 ppm STEL |
| | | NIOSH | 150 ppm TWA; 710 mg/m ³ TWA 200 ppm STEL; 950 mg/m ³ STEL 1700 ppm IDLH (10% LEL) |
| | | Supplier | No Established Limit |
| | | OHSA, CAN | 150 ppm TWA 200 ppm STEL |
| | | Mexico | 150 ppm TWA LMPE-PPT; 710 mg/m ³ TWA LMPE-PPT 200 ppm STEL [LMPE-CT]; 950 mg/m ³ STEL [LMPE-CT] |
| | | Brazil | No Established Limit |
| | | 0000822-06-0 | Hexamethylene diisocyanate |
| ACGIH | 0.005 ppm TWA | | |
| NIOSH | 0.005 ppm TWA; 0.035 mg/m ³ TWA 0.020 ppm Ceiling (10 min); 0.140 mg/m ³ Ceiling (10 min) | | |
| Supplier | No Established Limit | | |
| OHSA, CAN | 0.005 ppm TWA (designated substances regulation, listed under Isocyanates, organic compounds); 0.02 ppm Ceiling (designated substances regulation, listed under Isocyanates, organic compounds) 0.005 ppm TWA (listed under Isocyanates, organic compounds (Hexamethylene diisocyanate (HDI))); | | |
| Mexico | No Established Limit | | |
| Brazil | No Established Limit | | |
| 0028182-81-2 | Hexamethylene diisocyanate homopolymer | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| | | OHSA, CAN | No Established Limit |
| | | Mexico | No Established Limit |
| | | Brazil | No Established Limit |
| 0064742-95-6 | Petroleum naphtha | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| | | OHSA, CAN | No Established Limit |
| | | Mexico | No Established Limit |
| | | Brazil | No Established Limit |

Health Data

| CAS No. | Ingredient | Source | Value |
|--------------|--|--------|---|
| 0000123-86-4 | BUTYL ACETATE | NIOSH | Mucous membrane and eye irritation; high concentrations cause nervous system effects in animals |
| 0000822-06-0 | Hexamethylene diisocyanate | NIOSH | Respiratory effects and sensitization pulmonary irritation (Listed under |
| 0028182-81-2 | Hexamethylene diisocyanate homopolymer | NIOSH | No Established Limit |

| | | | |
|--------------|-------------------|-------|----------------------|
| 0064742-95-6 | Petroleum naphtha | NIOSH | No Established Limit |
|--------------|-------------------|-------|----------------------|

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|--|--------|--|
| 0000123-86-4 | BUTYL ACETATE | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0000822-06-0 | Hexamethylene diisocyanate | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0028182-81-2 | Hexamethylene diisocyanate homopolymer | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0064742-95-6 | Petroleum naphtha | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

8.2. Exposure Controls

Respiratory

Select equipment to provide protection from the ingredients listed in Section 3 of this document. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates dust, vapor, or mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. FOR USERS OF 3M RESPIRATORY PROTECTION ONLY: For information and assistance on 3M occupational health and safety products, call OH&ESD Technical Service toll free in U.S.A. 1-800-243-4630, in Canada call 1-800-267-4414. Please do not contact these numbers regarding other manufacturer's respiratory protection products. 3M does not endorse the accuracy of the information contained in this Material Safety Data Sheet. INDIVIDUALS WITH LUNG OR BREATHING PROBLEMS OR PRIOR REACTION TO ISOCYANATES

MUST NOT BE EXPOSED TO VAPOR OR SPRAY MIST. Do not breathe vapor or spray mist. Wear an appropriate, properly fitted respirator (NIOSH approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. A supplied air respirator (either positive pressure or continuous flow type) is required. Follow manufacturer's directions for respirator use and observe requirements specified in 29 CFR 1910.134.

Eyes

Avoid contact with eyes. Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 3 of this document. Depending on the site-specific conditions of use, safety glasses, chemical goggles, and/or head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.

Skin

Protective equipment should be selected to provide protection from exposure to the chemicals listed in Section 3 of this document. Depending on the site-specific conditions of use, protective gloves, apron, boots, head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.

Engineering Controls

Depending on the site-specific conditions of use, provide adequate ventilation.

Other Work Practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, using toilet facilities, etc. Promptly remove

soiled clothing and wash clothing thoroughly before reuse. Shower after work using plenty of soap and water.

| 9. Physical & Chemical Properties | |
|---|--|
| Appearance | Colored Liquid |
| Odour threshold | Not Measured |
| pH | No Established Limit |
| Melting point / freezing point | Not Measured |
| Initial boiling point and boiling range | 145 (C) 293 (F) |
| Flash Point | 27 (C) 80 (F) |
| Evaporation rate (Ether = 1) | Not Measured |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: 0.6 Upper Explosive Limit: No Established Limit |
| vapor pressure (Pa) | Not Measured |
| Vapor Density | Heavier than air |
| Specific Gravity | 1.12 |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | No Established Limit |
| VOC % | Refer to the Technical Data Sheet or label where information is available. |
| Other information | No further information |

| 10. Stability & Reactivity | |
|--|---|
| 10.1. Reactivity | No data available |
| 10.2. Chemical stability | This product is stable and hazardous polymerization will not occur. Not sensitive to mechanical impact. Excessive heat and fumes generation can occur if improperly handled. |
| 10.3. Possibility of hazardous reactions | No data available |
| 10.4. Conditions to avoid | No data available |
| 10.5. Incompatible materials | Strong oxidizing agents. |
| 10.6. Hazardous decomposition products | HIGHLY FLAMMABLE MATERIALS: Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) creating a vapor explosion hazard. Runoff to sewers may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. |

| 11. Toxicological Information | |
|-------------------------------|---|
| Acute toxicity | NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be |

harmful or fatal.

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LD50, mg/L/4hr | Inhalation Dust/Mist LD50, mg/L/4hr |
|---|-------------------------------|----------------------------------|---------------------------------|-------------------------------------|
| Hexamethylene diisocyanate homopolymer - (28182-81-2) | 5,000.00, Rat - Category: 5 | No data available | No data available | No data available |
| BUTYL ACETATE - (123-86-4) | 10,700.00, Rat - Category: NA | 17,600.00, Rabbit - Category: NA | No data available | No data available |
| Petroleum naphtha - (64742-95-6) | 6,800.00, Rat -Category: NA | 3,400.00, Rabbit - Category: 5 | No data available | No data available |
| Hexamethylene diisocyanate - (822-06-0) | No data available | No data available | No data available | No data available |

| Item | Category | Hazard |
|---|----------------|--|
| Acute Toxicity (mouth) | Not Classified | Not Applicable |
| Acute Toxicity (skin) | Not Classified | Not Applicable |
| Acute Toxicity (inhalation) | Not Classified | Not Applicable |
| Skin corrosion/irritation | Not Classified | Not Applicable |
| Eye damage/irritation | Not Classified | Not Applicable |
| Sensitization (respiratory) | 1 | May cause allergy or asthma symptoms of breathing difficulties if inhaled. |
| Sensitization (skin) | 1 | May cause an allergic skin reaction. |
| Germ toxicity | Not Classified | Not Applicable |
| Carcinogenicity | Not Classified | Not Applicable |
| Reproductive Toxicity | Not Classified | Not Applicable |
| Specific target organ systemic toxicity (single exposure) | Not Classified | Not Applicable |
| Specific target organ systemic Toxicity (repeated exposure) | Not Classified | Not Applicable |
| Aspiration hazard | Not Classified | Not Applicable |

12. Ecological Information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Toxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|---|----------------------------|----------------------------|--|
| Hexamethylene diisocyanate homopolymer - (28182-81-2) | 100.00, Danio rerio | 100.00, Daphnia magna | 100.00 (72 hr), Scenedesmus subspicatus |
| BUTYL ACETATE - (123-86-4) | 18.00, Pimephales promelas | 32.00, Artemia salina | 674.70 (72 hr), Scenedesmus subspicatus |
| Petroleum naphtha - (64742-95-6) | 9.22, Oncorhynchus mykiss | 6.14, Daphnia magna | 19.00 (72 hr), Selenastrum capricornutum |
| Hexamethylene diisocyanate – (822-06-0) | 82.80, Danio rerio | 89.10, Daphnia magna | 77.40 (72 hr), Desmodesmus subspicatus |

- | | |
|--|--|
| 12.1. Persistence and degradability | No data available |
| 12.2. Bioaccumulative potential | Not Measured |
| 12.3. Mobility in soil | No data available |
| 12.4. Results of PBT and vPvB assessment | This product contains no PBT/vPvB chemicals. |
| 12.5. Other adverse effects | No data available |

13. Disposal Information

13.1 Waste treatment methods Do not allow spills to enter drains or watercourses.
Dispose of in accordance with local, state and federal regulations. (Also reference RCRA information in Section 15 if listed).

14. Transportation Information

14.1 UN number UN 1263
14.2 UN proper shipping name PAINT
14.3 Transport hazard class(es)

| | DOT (Domestic Surface Transportation) | IMO / IMDG (Ocean Transportation) |
|----------------------|--|--------------------------------------|
| Proper Shipping Name | PAINT | PAINT |
| UN Number | UN 1263 | UN 1263 |
| Hazard Class | 3 | 3, Sub Class 3 |
| Packaging Group | III | III |
| | CERCLA/DOT RQ: 5359 gal. / 50000 lbs. | System Reference Code: 1 |

14.4 Packing group III
14.5 Environmental hazards IMDG Marine Pollutant: No
14.6 Special precautions for user Not Applicable

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not Applicable

15. Regulatory Information

Regulatory Overview

The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. All ingredients of this product are listed on the TSCA (Toxic Substance Control Act) Inventory or are not required to be listed on the TSCA Inventory.

| | |
|--|---|
| WHMIS Classification | B2 D2A |
| DOT Marine Pollutants (10%): | (No Product Ingredients Listed) |
| DOT Severe Marine Pollutants (1%): | (No Product Ingredients Listed) |
| EPCRA 311/312 Chemicals and RQs (>.1%): | Benzene, ethyl- (1000 lb final RQ; 454 kg final RQ) Hexamethylene diisocyanate (100 lb final RQ; 45.4 kg final RQ) BUTYL ACETATE (5000 lb final RQ (listed under Butyl acetate); 2270 kg final RQ (listed under Butyl acetate)) |
| EPCRA 302 Extremely Hazardous (>.1%): | (No Product Ingredients Listed) |
| EPCRA 313 Toxic Chemicals (>.1%): | Benzene, ethyl- Hexamethylene diisocyanate BUTYL ACETATE |
| Mass RTK Substances (>1%) : | BUTYL ACETATE |
| Penn RTK Substances (>1%) : | BUTYL ACETATE |
| Penn Special Hazardous Substances (>.01%): | (No Product Ingredients Listed) |
| RCRA Status: | (No Product Ingredients Listed) |
| N.J. RTK Substances (>1%): | BUTYL ACETATE |
| N.J. Special Hazardous Substances (>.01%): | Benzene, ethyl- BUTYL ACETATE |
| N.J. Env. Hazardous Substances (>.1%): | Benzene, ethyl- |
| Hexamethylene diisocyanate Proposition 65 - Carcinogens (>0%): | Benzene, ethyl- |

Proposition 65 - Female Repro Toxins (No Product Ingredients Listed)
(>0%):
Proposition 65 - Male Repro Toxins (>0%): (No Product Ingredients Listed)
Proposition 65 - Developmental Toxins (No Product Ingredients Listed)
(>0%):

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| 16. Other Information |
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SDS Revision Date: 3/11/2014

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

- H226 Flammable liquid and vapor.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

Safety Data Sheet

| 1. Identification | | |
|-------------------|--|--|
|-------------------|--|--|

| | | |
|---------------------------|--|--|
| 1.1 Product Name | Bathworks® Liquid Primer | |
| 1.2 Distributor | Munro Products 9150 Clarence Center Road Clarence Center, NY 14032 | (716) 741-9450 www.bath-works.net |
| 1.3 Emergency Information | CHEMTREC® Poison Control Center | (800) 424-9300 (800) 854-6813 |

| 2. Hazard Identification | | |
|--------------------------|--|--|
|--------------------------|--|--|

- 2.1 Classification of the substance or mixture
- FLAMMABLE LIQUIDS - Category 3
 - ACUTE TOXICITY (inhalation) - Category 4
 - SKIN CORROSION/IRRITATION - Category 2
 - SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
 - CARCINOGENICITY - Category 3
 - TOXIC TO REPRODUCTION (Unborn child) - Category 2
 - SPECIFIC TARGET ORGAN TOXICITY
 - SINGLE EXPOSURE (Respiratory tractirritation and Narcotic effects) - Category 3
 - REPEATED EXPOSURE - Category 2
 - ASPIRATION HAZARD - Category 1

2.2 Label Elements

Pictograms



Signal Word

Danger

Hazard Statements

Flammable liquid and vapor.
Harmful if inhaled.
Causes serious eye irritation. Causes skin irritation.
Suspected of damaging the unborn child. Suspected of causing cancer.
May be fatal if swallowed and enters airways. May cause respiratory irritation.
May cause drowsiness and dizziness.
May cause damage to organs through prolonged or repeated exposure

2.3 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. 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. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.

Response

Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off

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|----------------------------------|--|
| | contaminated clothing. If skin irritation 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. If eye irritation persists: Get medical 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. |
| Supplemental label elements | DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. Please refer to the SDS for additional information. Do not transfer contents to other containers for storage. |
| Hazards not otherwise classified | None known. |

2.4 HMIS Health: 2 Flammability: 0 Physical Hazards: 0

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|---------------------------|
| 3. Ingredient Composition |
|---------------------------|

| Ingredient name | % by weight | CAS number |
|-----------------|-------------|------------|
| Xylene | 84.9 | 1330-20-7 |
| Ethylbenzene | 15.0 | 100-41-4 |
| Toluene | 0.1 | 108-88-3 |

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|--------------|
| 4. First Aid |
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4.1 General First Aid Measures

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|------------|--|
| Eyes | 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. |
| Skin | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| 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. |

4.2 Most important symptoms and effects, both acute and delayed

| | |
|------|--------------------------------|
| Eyes | Causes serious eye irritation. |
|------|--------------------------------|

| | |
|--|--|
| Inhalation | Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. |
| Skin | Causes skin irritation. |
| Ingestion | Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach. |
| 4.3 Overexposure signs & symptoms | |
| Eyes | 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, reduced fetal weight, increase in fetal deaths, skeletal malformations |
| Skin | Adverse symptoms may include the following: irritation, redness, reduced fetal weight, increase in fetal deaths skeletal, malformations |
| Ingestion | Adverse symptoms may include the following: nausea or vomiting, reduced fetal weight, increase in fetal deaths, skeletal malformations |
| 4.4 Indication of immediate medical attention and special treatment needed, if necessary | |
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | None |
| 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. |

5. Firefighting

| | |
|--|--|
| 5.1 Extinguishing Media | |
| Suitable extinguishing media | Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | Do not use water jet. |
| 5.2 Specific hazards arising from the chemical | Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. |
| 5.3 Hazardous thermal decomposition products | Decomposition products may include the following materials: carbon dioxide, carbon monoxide |
| 5.4 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. |
| 5.5 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. |

6. Accidental Release

| | |
|---|--|
| 6.1 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| 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 |

Environmental precautions information in "For non- emergency personnel".
 Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.2 Methods and materials 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 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling & Storage

7.1 Protective measures Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor 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.

7.2 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.

7.3 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 oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure Controls & Personal Protection

8.1 Control Parameters

| Ingredient name | Exposure limits |
|-----------------|--|
| Xylene | ACGIH TLV (United States, 4/2014). TWA: 100 ppm 8 hours. TWA: 434 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m ³ 15 minutes. |
| | OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. |

| | |
|--------------|---|
| | TWA: 435 mg/m ³ 8 hours. |
| | ACGIH TLV (United States, 4/2014). TWA: 20 ppm 8 hours. |
| Ethylbenzene | NIOSH REL (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 435 mg/m ³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m ³ 15 minutes. |
| | OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 435 mg/m ³ 8 hours. |
| | OSHA PEL Z2 (United States, 2/2013). TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. |
| Toluene | NIOSH REL (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 375 mg/m ³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m ³ 15 minutes. |
| | ACGIH TLV (United States, 4/2014). TWA: 20 ppm 8 hours. |

8.2 Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8.3 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.

8.4 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. 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.

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.

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.

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 Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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| 9. Physical & Chemical Properties |
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|--|---|
| Physical state | Liquid. |
| Color | Not available. |
| Odor | Not available. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point | Not available. |
| Boiling point | 136°C (276.8°F) |
| Flash point | Closed cup: 27°C (80.6°F) [Pensky-Martens Closed Cup] |
| Evaporation rate | 0.8 (butyl acetate = 1) |
| Flammability (solid, gas) | Not available. |
| Lower and upper explosive (flammable) limits | Lower: 1%, Upper: 7% |
| Vapor pressure | 0.13 kPa (0.946 mm Hg) [at 20°C] |
| Vapor density | 3.66 [Air = 1] |
| Relative density | 0.86 |
| Solubility | Not available. |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Kinematic (room temperature): <0.205 cm ² /s (<20.5 cSt) Kinematic (40°C (104°F)): <0.205 cm ² /s (<20.5 cSt) |
| Heat of combustion | 0.00002764 kJ/g |

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| 10. Stability & Reactivity |
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| | |
|---|--|
| 10.1 Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | The product is stable. |
| 10.3 Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. |
| 10.5 Incompatible materials | Reactive or incompatible with the following materials: oxidizing materials |
| 10.6 Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

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| 11. Toxicological Information |
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11.1 Acute Toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|--------|---------|------|----------|
|-------------------------|--------|---------|------|----------|

| | | | | |
|--------------|-----------------------|--------|---------------------|---------|
| Xylene | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| Ethylbenzene | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |
| Toluene | LC50 Inhalation Vapor | Rat | 49 g/m ³ | 4 hours |
| | LD50 Oral | Rat | 636 mg/kg | - |

11.2 Irritation Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|----------------------------|-------------|
| Xylene | Eyes - Mild irritant | Rabbit | - | 87 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 milligrams | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 microliters | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 | - |
| | Skin - Moderate irritant | Rabbit | - | 100 Percent | - |
| Ethylbenzene | Eyes - Severe irritant | Rabbit | - | 500 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 15 milligrams | - |
| Toluene | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 100 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 870 Micrograms | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| | Skin - Mild irritant | Pig | - | 24 hours 250 microliters | - |
| | Skin - Mild irritant | Rabbit | - | 435 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 500 milligrams | - |

11.3 Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Xylene | - | 3 | - |
| Ethylbenzene | - | 2B | - |
| Toluene | - | 3 | - |

11.4 Sensitization Not available.

11.5 Mutagenicity Not available.

11.6 Carcinogenicity Not available.

11.7 Reproductive toxicity Not available.

11.8 Teratogenicity Not available.

11.9 Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|--------------|------------|-------------------|---|
| Xylene | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Ethylbenzene | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |
| Toluene | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |

11.10 Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|--------------|------------|-------------------|----------------|
| Xylene | Category 2 | Not determined | Not determined |
| Ethylbenzene | Category 2 | Not determined | Not determined |
| Toluene | Category 2 | Not determined | Not determined |

11.11 Aspiration hazard

| Name | Result |
|--------------|--------------------------------|
| Xylene | ASPIRATION HAZARD - Category 1 |
| Ethylbenzene | ASPIRATION HAZARD - Category 1 |
| Toluene | ASPIRATION HAZARD - Category 1 |

11.12 Numerical measures of toxicity

| Route | Acute Toxicity Estimate (ATE) |
|--------------------|-------------------------------|
| Oral | 4163.1 mg/kg |
| Inhalation (gases) | 5892.1 ppm |

12. Ecological Information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|------------------------------------|---|----------|
| Xylene | Acute LC50 8500 µg/l Marine water | Crustaceans – Palaemonetes pugio | 48 hours |
| | Acute LC50 13400 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| Ethylbenzene | Acute EC50 4600 µg/l Fresh water | Algae – Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 3600 µg/l Fresh water | Algae – Pseudokirchneriella subcapitata | 96 hours |
| | Acute EC50 6530 µg/l Fresh water | Crustaceans - Artemia sp. - Nauplii | 48 hours |
| | Acute EC50 2930 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 4200 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| Toluene | Acute EC50 12500 µg/l Fresh water | Algae – Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 11600 µg/l Fresh water | Crustaceans – Gammarus pseudolimnaeus - Adult | 48 hours |
| | Acute EC50 6000 µg/l Fresh water | Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |
| | Acute LC50 5500 µg/l Fresh water | Fish - Oncorhynchus kisutch - Fry | 96 hours |
| | Chronic NOEC 1000 µg/l Fresh water | Daphnia - Daphnia magna | 21 days |

12.2 Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Xylene | - | - | Readily |
| Ethylbenzene | - | - | Readily |
| Toluene | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-------------|-----------|
| Xylene | - | 8.1 to 25.9 | low |
| Toluene | - | 90 | low |

12.4 Soil/water partition coefficient (KOC) Not available

12.5 Other adverse effects No known significant effects or critical hazards.


13. Disposal Information

13.1 Disposal Methods

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

14. Transportation Information

14.1 Proper Shipping Name UN1307

| | |
|-----------------------------|--|
| 14.2 UN Number | XYLENES |
| 14.3 Hazard Class | 3  |
| 14.4 Packaging Group | III |
| 14.5 Environmental Hazards | None |
| 14.6 Additional Information | |
| IMDG | Emergency schedules (EmS) F-E, S-D |
| Mexico | ERG #130 |
| 14.7 Bulk Transportation | Not available |
| 14.8 Special Precautions | Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations. |

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| 15. Regulatory Information |
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|---------------------|--|
| California Prop. 65 | WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm |
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|------------------------------|
| 16. Other Information |
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|--------------------|----------|
| SDS Revision Date: | 5/1/2015 |
|--------------------|----------|

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

Safety Data Sheet

1. Identification

| | | |
|---------------------------|--|--|
| 1.1 Product Name | BATHWORKS® Etching Cleaner | |
| 1.2 Distributor | Munro Products 9150 Clarence Center Road Clarence Center, NY 14032 | (716) 741-9450 www.bath-works.net |
| 1.3 Emergency Information | CHEMTREC® Poison Control Center | (800) 424-9300 (800) 854-6813 |

2. Hazard Identification

2.1 Classification of the substance or mixture

Skin corrosion: 2

Eye Irritant: 2A

2.2 Label Elements



WARNING; Harmful if swallowed.
Eye and skin irritant.
May cause burns.

2.3 NFPA Rating: Health: 2 Fire: 0 Instability: 0

3. Ingredient Composition

| CHEMICAL NAME | CAS Number | %WT | STEL | TWA |
|-----------------------------------|------------|--------|------------|------------|
| Trisodium Phosphate Dodecahydrate | 10101-89-0 | 75-80% | Not listed | Not Listed |
| Sodium Sesquicarbonate | 533-96-0 | 20-25% | Not listed | Not Listed |

4. First Aid

4.1 First Aid Procedures

| | |
|------------|---|
| Skin | Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse |
| Eyes | Flood with plenty of water with eyelids held open for at least 15 minutes and get medical attention promptly. |
| Inhalation | If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention. |
| Ingestion | DO NOT induce vomiting. If conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. |

4.2 General Health Considerations

| | |
|------------|---|
| Skin | Prolonged and/or repeated contact may cause irritation and/or dermatitis. Contact with skin causes irritation and positive burns, especially if the skin is wet or moist. |
| Eyes | Eye contact can cause irritation, redness, tearing, blurred vision and may cause transient injury to cornea. |
| Inhalation | Inhalation of dust can cause nasal and respiratory irritation |
| Ingestion | May cause irritation, burns to mouth and esophagus. Aspiration of the swallowed or vomited product can cause severe pulmonary complications |

| | |
|--|---|
| 4.3 Notes to physician | Treat symptomatically. No specific antidote available. |
| 4.4 Aggravation of pre-existing conditions | Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema, or bronchitis. Skin contact may aggravate existing skin disease. |

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|-----------------|
| 5. Firefighting |
|-----------------|

| | |
|---------------------------------|---|
| 5.1 Flash Point: | None. |
| 5.2 Extinguishing Media: | Not combustible. Use extinguishing method suitable for surrounding fire. |
| 5.3 Fire Fighting Procedures: | Solutions are moderately to strong alkaline. Wear full protective clothing. |
| 5.4 Fire and Explosion Hazards: | Oxides of sodium and oxides of phosphorus |

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| 6. Accidental Release |
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|-------------------------------|--|
| 6.1 Small Spill | Wipe or scrape up any material. Wash area thoroughly with detergent and water; ventilate adequately with good fresh air movement at floor level. |
| 6.2 Large Spill | Wipe or scrape up any material. Wash area thoroughly with detergent and water; ventilate adequately with good fresh air movement at floor level. |
| 6.3 Environmental Precautions | Do not release into sewers or waterways. |
| 6.4 Methods for Containment | Shovel up and dispose of at an appropriate waste disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal |

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| 7. Handling & Storage |
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|--------------|---|
| 7.1 Handling | Avoid direct or prolonged contact with skin and eyes. Avoid breathing dusts. Do not ingest. |
| 7.2 Storage: | Store in area that is cool and dry. Moisture can cause caking. |

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| 8. Exposure Controls & Personal Protection |
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|-----------------------------------|--|
| 8.1 Airborne Exposure Limits | See section 3 |
| 8.2 Engineering Controls | When a potential for excessive exposure exists, use local ventilation at the point of generation |
| 8.3 Personal Protection Equipment | |
| Eye Protection: | Use dust proof goggles if dust is irritating eyes. |
| Respiratory Protection: | Wear NIOSH/MSHA approved dust respirator, if dust is formed. |
| Skin Protection: | Use dust proof gloves. |

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|-----------------------------------|
| 9. Physical & Chemical Properties |
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| | |
|--|-------------------------|
| Appearance: | White crystalline solid |
| Odor: | None. |
| Boiling Point: | Decomposes |
| Vapor Pressure: | N/A |
| Solubility In Water: | Moderate |
| pH (1% in H ₂ O) | 11-12 |
| VOC %: N/A | N/A |
| Specific Gravity (H ₂ O=1): | 1.035 |
| Evaporation Rate: | N/A |
| Melting Point | No data |
| Freezing Point | No data |
| Flash Point | No data |
| Autoignition Temperature | No data |

Lower explosive limit No data
Upper explosive limit No data

10. Stability & Reactivity

10.1 Stability: Stable
10.2 Conditions to Avoid:
10.3 Incompatibility: Solutions in water are highly alkaline and may produce hydrogen gas when in contact with aluminum. Will react with acids to form carbon dioxide
10.4 Hazardous Decomposition Products: Oxides of sodium and oxides of phosphorous.
10.5 Hazardous Polymerization: Will not occur.

11. Toxicological Information

11.1 Carcinogenicity: Not listed by ACGIH, IARC, NIOSH, NTP or OSHA
11.2 Acute: This product has not been tested as a whole.
11.3 Subchronic: This product has not been tested as a whole.
11.4 Routes of Exposure: Inhalation, Ingestion.

12. Ecological Information

12.1 Environmental Fate: While the alkalinity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.

13. Disposal Information

Small quantities may be deposited in general trash and residue flushed down drain with water. Large spills must be disposed of in accordance with local state and federal regulations.

14. Transportation Information

Not Regulated for Transportation
14.1 Proper Shipping Name N/A
14.2 UN Number N/A
14.3 Hazard Class N/A
14.4 Packaging Group N/A
14.5 Bulk Shipping N/A

15. Regulatory Information

15.1 OSHA: The international regulated ingredients of this product are listed
15.2 CERCLA-RQ: Product component (Trisodium Phosphate Dodecahydrate-5,000 lbs.)
15.3 SARA Hazard Category: None
15.4 SARA 313: Not listed
15.5 TSCA: CAS#10101-89-0 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CRF720.3(u)(2)). CAS#7601-54-9 is listed on the TSCA inventory

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| 16. Other Information |
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SDS Revision Date: 8/14/2018

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

Safety Data Sheet

1. Identification

| | | |
|---------------------------|---------------------------|--------------------|
| 1.1 Product Name | BATHWORKS® Fine Grit | |
| 1.2 Distributor | Munro Products | (716) 741-9450 |
| | 9150 Clarence Center Road | |
| | Clarence Center, NY 14032 | www.bath-works.net |
| 1.3 Emergency Information | CHEMTREC® | (800) 424-9300 |
| | Poison Control Center | (800) 854-6813 |

2. Hazard Identification

| | |
|---|---|
| ROUTES OF EXPOSURE | EYE or SKIN contact with product. |
| EFFECTS OF OVEREXPOSURE | |
| EYES: | Irritation. |
| SKIN: | Prolonged or repeated exposure may cause irritation. |
| INHALATION: | Irritation of the upper respiratory system. |
| SIGNS AND SYMPTOMS OF OVEREXPOSURE | Redness and itching or burning sensation may indicate eye or excessive skin exposure. |
| MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE | None generally recognized. |
| CANCER INFORMATION | For complete discussion of toxicology data refer to Section 11. |

HMIS Rating Health: 1 Flammability: 0 Reactivity: 0

3. Ingredient Composition

No ingredients in this product are hazardous as defined by the Department of Labor.

4. First Aid

| | |
|-------------|---|
| EYES: | Flush eyes with large amounts of water for 15 minutes. Get medical attention. |
| SKIN: | Wash affected area thoroughly with soap and water. |
| INHALATION: | If affected, remove from exposure. Restore breathing. Keep warm and quiet. |
| INGESTION: | Do not induce vomiting. Get medical attention immediately |

5. Firefighting

| | |
|------------------------------------|--|
| EXTINGUISHING MEDIA | Carbon Dioxide, Dry Chemical, Foam |
| LEL | Not Applicable |
| UEL | Not Applicable |
| FLAMMABILITY CLASSIFICATION | Not Applicable |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | Closed containers may explode (due to the build-up of pressure) when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. |

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.
Water spray may be ineffective. If water is used, fog nozzles are preferable.
Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

6. Accidental Release

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove with inert absorbent.

7. Handling & Storage

STORAGE CATEGORY

Not Applicable

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

8. Exposure Controls & Personal Protection

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation.
Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.
Wash hands after using.
This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).
Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

Required for long or repeated contact.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields

9. Physical & Chemical Properties

PRODUCT WEIGHT

7.48 lb/gal 896 g/l

SPECIFIC GRAVITY

0.9

BOILING POINT

Not Available

| | |
|---------------------|---------------|
| MELTING POINT | Not Available |
| VOLATILE VOLUME | 0% |
| EVAPORATION RATE | Not Available |
| VAPOR DENSITY | Not Available |
| SOLUBILITY IN WATER | Not Available |

VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged)

| | | |
|-------------|-------|--|
| 0.00 lb/gal | 0 g/l | Less Water and Federally Exempt Solvents |
| 0.00 lb/gal | 0 g/l | Emitted VOC |

| | |
|---------------------------------------|--|
| 10. Stability & Reactivity | |
|---------------------------------------|--|

| | |
|----------------------------------|--|
| STABILITY | Stable |
| CONDITIONS TO AVOID | None known. |
| INCOMPATIBILITY | None known. |
| HAZARDOUS DECOMPOSITION PRODUCTS | By fire: Carbon Dioxide, Carbon Monoxide |
| HAZARDOUS POLYMERIZATION | Will not occur |

| | |
|--------------------------------------|--|
| 11. Toxicological Information | |
|--------------------------------------|--|

| | |
|------------------------|--|
| CHRONIC HEALTH HAZARDS | No ingredient in this product is an IARC, NTP or OSHA listed carcinogen. |
| TOXICOLOGY DATA | No LC50 or LD50 data available |

| | |
|-----------------------------------|--|
| 12. Ecological Information | |
|-----------------------------------|--|

| | |
|------------------------------|--------------------|
| ECOTOXICOLOGICAL INFORMATION | No data available. |
|------------------------------|--------------------|

| | |
|---------------------------------|--|
| 13. Disposal Information | |
|---------------------------------|--|

| | |
|-----------------------|---|
| WASTE DISPOSAL METHOD | Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution. |
|-----------------------|---|

| | |
|---------------------------------------|--|
| 14. Transportation Information | |
|---------------------------------------|--|

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

| | |
|-----------------|-----------------------------------|
| US Ground (DOT) | Not Regulated for Transportation. |
| Canada (TDG) | Not Regulated for Transportation. |
| IMO | Not Regulated for Transportation. |
| IATA/ICAO | Not Regulated for Transportation. |

15. Regulatory Information

| | |
|---------------------------|--|
| SARA 313 (40 CFR 372.65C) | No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) |
| SUPPLIER NOTIFICATION | Supplier Notification. |
| TSCA CERTIFICATION | All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory. |

16. Other Information


SDS Revision Date: 3/17/2015

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Safety Data Sheet

| 1. Identification | | |
|---------------------------|--|--|
| 1.1 Product Name | BATHWORKS® Quick Dry Refinishing Kit - Part A Base Color | |
| 1.2 Distributor | Munro Products 9150 Clarence Center Road Clarence Center, NY 14032 | (716) 741-9450 www.bath-works.net |
| 1.3 Emergency Information | CHEMTREC® Poison Control Center | (800) 424-9300 (800) 854-6813 |

| 2. Hazard Identification | |
|--|---|
| 2.1 OSHA/HCS status | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| 2.2 Classification of the substance or mixture | FLAMMABLE LIQUIDS: Category 3 ACUTE TOXICITY (inhalation): Category 4 SKIN SENSITIZATION: Category 1 CARCINOGENICITY: Category 1A Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 35.9% (Oral), 35.9% (Dermal), 47% (Inhalation) This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). |
| 2.3 Signal Words | Danger |
| 2.4 Pictograms |  |
| 2.5 Hazard Statements | Flammable liquid and vapor. Harmful if inhaled. May cause an allergic skin reaction. May cause cancer. |
| 2.6 Precautionary Statements Prevention | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Contaminated work clothing must not be allowed out of the workplace. |
| Response | IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off |

| | |
|--------------------------------------|---|
| | immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical 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. |
| 2.7 Supplemental label elements | Sanding and grinding dusts may be harmful if inhaled. 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. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/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. Wash thoroughly after handling. Emits toxic fumes when heated. |
| 2.8 Hazards not otherwise classified | Prolonged or repeated contact may dry skin and cause irritation. |

3. Ingredient Composition

3.1 Substance/mixture

Mixture

| 3.2 Chemical Identity | 3.3 CAS No. | 3.4 Concentration |
|---|-------------|-------------------|
| titanium dioxide | 13463-67-7 | 54 |
| heptan-2-one | 110-43-0 | 19 |
| barium sulfate | 7727-43-7 | 25 |
| crystalline silica, respirable powder (>10 microns) | 14808-60-7 | 1 |
| maleic anhydride | 108-31-6 | 0.90 |
| K-Kat 348 | | 0.10 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation. 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.

4. First Aid

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

4.2 First Aid Measures

| | |
|--------------|--|
| Eye Contact | Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. |
| Skin Contact | Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. |
| 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. |

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

4.2 Most significant signs/symptoms

Acute health effects

Eye Contact No known significant effects or critical hazards.

Skin Contact Harmful if inhaled.

Inhalation Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

Ingestion No known significant effects or critical hazards.

Overexposure signs/symptoms

Eye Contact No specific data.

Skin Contact Adverse symptoms may include the following: irritation, redness, dryness, cracking.

Inhalation No specific data.

Ingestion No specific data.

4.3 Notes to Physician

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

4.4 Specific Treatments

No specific treatment.

4.5 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.

5. Firefighting

5.1 Extinguishing media

Suitable extinguishing media Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media Do not use water jet.

5.2 Specific hazards arising from the chemical

Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products Decomposition products may include the following materials: carbon oxides, sulfur oxides, metal oxide/oxides.

5.3 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.

5.4 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.

6. Accidental Release

6.1 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 spilled material.

| | |
|---|--|
| | Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| For emergency responders | If specialized 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 nonemergency personnel". |
| Environmental precautions | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| 6.2 Methods and materials 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 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

7. Handling & Storage

| | |
|--|---|
| 7.1 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. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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. |
| 7.2 Special precautions | Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. |
| 7.3 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. |

7.4 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 oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure Controls & Personal Protection

8.1 Occupational Exposure Limits

| Ingredient name | OSHA PEL | ACGIH TLV |
|---|---|---|
| titanium dioxide | TWA: 15 mg/m ³ 8 hours. Form: Total dust | TWA: 10 mg/m ³ 8 hours. |
| heptan-2-one | TWA: 465 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. | TWA: 233 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. |
| barium sulfate | TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust | TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction |
| crystalline silica, respirable powder (>10 microns) | Z3 TWA: 10 mg/m ³ / (%SiO ₂ +2) 8 hours. Form: Respirable Z3 TWA: 50 µg/m ³ 8 hours. Form: Respirable dust TWA: 250 mppcf / (%SiO ₂ +5) 8 hours. Form: Respirable | TWA: 0.025 mg/m ³ 8 hours. Form: Respirable fraction |
| maleic anhydride | TWA: 1 mg/m ³ 8 hours. TWA: 0.25 ppm 8 hours. | Skin sensitizer. Inhalation sensitizer. TWA: 0.01 mg/m ³ 8 hours. Form: Inhalable fraction and vapor |

Key to abbreviations

- | | |
|--|--|
| A = Acceptable Maximum Peak | S = Potential skin absorption |
| ACGIH = American Conference of Governmental Industrial Hygienists. | SR = Respiratory sensitization |
| C = Ceiling Limit | SS = Skin sensitization |
| F = Fume | STEL = Short term Exposure limit values |
| IPEL = Internal Permissible Exposure Limit | TD = Total dust |
| OSHA = Occupational Safety and Health Administration. | TLV = Threshold Limit Value |
| R = Respirable | TWA = Time Weighted Average |
| | Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances |

8.2 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.

8.3 Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne

| | |
|-------------------------------------|--|
| | contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. |
| 8.4 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. |
| 8.5 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. |
| 8.6 Eye/face protection | Safety glasses with side shields. |
| 8.7 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 |
| 8.8 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 antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. |
| 8.9 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. |
| 8.10 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. |

| |
|--|
| 9. Physical & Chemical Properties |
|--|

| | |
|---------------------------|---------------------------|
| Physical state | Liquid. |
| Color | White. |
| Odor | Characteristic. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point | Not available. |
| Boiling point | >37.78°C (>100°F) |
| Flash point | Closed cup 28.89°C (84°F) |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Flammability (solid, gas) | Not available. |

Respiratory There are no data available on the mixture itself.
 11.4 Mutagenicity There are no data available on the mixture itself.
 11.5 Carcinogenicity There are no data available on the mixture itself.

| Product/ingredient name | OSHA | IARC | NTP |
|---|------|------|---------------------------------|
| titanium dioxide | - | 2B | - |
| crystalline silica, respirable powder (>10 microns) | - | 1 | Known to be a human carcinogen. |

Carcinogen Classification code: IARC: 1, 2A, 2B, 3, 4
 NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen
 OSHA: +
 Not listed/not regulated: -

11.6 Reproductive toxicity There are no data available on the mixture itself.
 11.7 Teratogenicity There are no data available on the mixture itself.
 11.8 Specific target organ toxicity (single exposure)

| Name: Single Exposure | Category | Route of exposure | Target organs |
|-------------------------|------------|-------------------|--------------------|
| heptan-2-one | Category 3 | Not applicable. | Narcotic effects |
| | | | |
| Name: Repeated Exposure | Category | Route of exposure | Target organs |
| maleic anhydride | Category 1 | Inhalation | respiratory system |

Target organs Contains material which causes damage to the following organs: brain.
 Contains material which may cause damage to the following organs: kidneys, lungs, peripheral nervous system, upper respiratory tract, immune system, skin, central nervous system (CNS), eye, lens or cornea.

11.9 Aspiration hazard Not available.

Information on the likely routes of exposure

11.10 Potential acute health effects

Eye contact No known significant effects or critical hazards.
 Inhalation Harmful if inhaled.
 Skin contact Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
 Ingestion No known significant effects or critical hazards.

11.11 Over-exposure signs/symptoms

Eye contact No specific data.
 Inhalation No specific data.
 Skin contact Adverse symptoms may include the following irritation redness dryness cracking
 Ingestion No specific data.

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

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.
 This product contains TiO2 which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO2 is utilized as a raw material in a liquid coating formulation. In this case, the TiO2 particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO2 when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the

duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). Exposure to component solvent vapor 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

Long term exposure

11.13 Potential chronic health effects

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

May cause cancer. Risk of cancer depends on duration and level of exposure. 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.

11.14 Acute toxicity estimates

| Ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|-------------------------|---------------------------|---|---|--|
| PITTHANE ULTRA Gloss Urethane White Base | 5525.4 | 14478.4 | N/A | 47.7 | 4.3 |
| heptan-2-one | 1600 | 10206 | N/A | 16.7 | 1.5 |
| barium sulfate | N/A | 2500 | N/A | N/A | N/A |
| maleic anhydride | 400 | 2620 | N/A | N/A | N/A |

12. Ecological Information

12.1 Toxicity

| Ingredient name | Result | Species | Exposure |
|------------------------|---------------------------------|-------------------------|-----------------|
| titanium dioxide | Acute LC50 >100 mg/l | Daphnia - Daphnia magna | 48 hours |
| heptan-2-one | Fresh water Acute LC50 131 mg/l | Fish | 96 hours |

12.2 Persistence and degradability

| Ingredient name | Test | Result | Dose | Inoculum |
|------------------------|-------------|--------------------------|-------------|-----------------|
| heptan-2-one | OECD 310 | 69 % - Readily - 28 days | - | - |

| Ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-----------------|-------------------|------------|------------------|
| heptan-2-one | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| heptan-2-one | 1.98 | - | low |

12.4 Mobility in soil Soil/water partition coefficient (KOC) Not available.

13. Disposal Information

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

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. Transportation Information

| | U.S. D. O. T. | IMDG | IATA |
|----------------------------------|-----------------|-----------------|-----------------|
| 14.1 Proper Shipping Name | Paint | Paint | Paint |
| 14.2 UN Number | UN1263 | UN1263 | UN1263 |
| 14.3 Hazard Class | 3 | 3 | 3 |
| 14.4 Packaging Group | III | III | III |
| 14.5 Environmental hazards | No. | No. | No. |
| 14.6 Marine pollutant substances | Not applicable. | Not applicable. | Not applicable. |
| 14.7 Product RQ (lbs) | 44329.4 | Not applicable. | Not applicable. |
| 14.8 RQ substances | (xylene) | Not applicable. | Not applicable. |

14.9 Additional Information: DOT Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

14.10 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.

15. Regulatory Information

15.1 TSCA 8b All components are listed or exempted.

15.2 SARA 302/304

SARA 304 RQ Not applicable.

Composition/information on ingredients No products were found.

15.3 SARA 311/312 Classification

FLAMMABLE LIQUIDS: Category 3
 ACUTE TOXICITY (inhalation): Category 4
 SKIN SENSITIZATION: Category 1
 CARCINOGENICITY: Category 1A
 HNOC: Defatting irritant

15.4 Composition/information on ingredients

| Ingredient | Percent | Classification |
|---|-----------|--|
| titanium dioxide | ≥20 - ≤50 | CARCINOGENICITY: Category 2 |
| heptan-2-one | ≥10 - <20 | FLAMMABLE LIQUIDS: Category 3 ACUTE TOXICITY (oral): Category 4 ACUTE TOXICITY (inhalation): Category 4 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects): Category 3 HNOC: Defatting irritant |
| crystalline silica, respirable powder (>10 microns) | ≤1.0 | CARCINOGENICITY: Category 1A |
| maleic anhydride | <0.10 | COMBUSTIBLE DUSTS ACUTE TOXICITY (oral): Category 4 SKIN CORROSION: Category 1B SERIOUS EYE DAMAGE: Category 1 RESPIRATORY SENSITIZATION: Category 1A SKIN SENSITIZATION: Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) (inhalation): Category 1 |

California Prop. 65



WARNING: Cancer

www.p65warnings.ca.gov

16. Other Information

16.1 Hazardous Material Information Health: 2 Flammability: 3 Physical Hazards: 0 System

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

16.2 National Fire Prevention Association Health: 2 Flammability: 3 Instability : 0

16.3 Key to abbreviations

ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973
 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 SGG = Segregation Group

16.4 SDS Revision Date:

UN = United Nations

2/29/2020

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