



Safety Data Sheet

Issue Date 14-Aug-2018

Revision Date 10-May-2018

Revision Number 18

1. IDENTIFICATION

Product identifier

Product Code N-69-00WHA
Product Name HB EPOXOLINEII TNEMEC WHITE

Other means of identification

Common Name SERIES N69/V69, PART A
UN/ID no. 1263
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 816-474-3400
Distributor Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|------------|
| Acute toxicity - Oral | Category 4 |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Skin sensitization | Category 1 |
| Carcinogenicity | Category 2 |
| Reproductive Toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Flammable Liquids | Category 3 |

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
Suspected of causing cancer
Suspected of damaging fertility or the unborn child

May cause respiratory irritation. May cause drowsiness or dizziness
 Causes damage to organs through prolonged or repeated exposure
 Flammable liquid and vapor



Appearance opaque

Physical state liquid

Odor aromatic

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
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/mixing/equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Keep cool

Response

IF exposed or concerned: Get medical advice/attention
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed
 Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

Other information

Harmful to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

8.93713 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No | Weight-% |
|-----------------------------------|------------|-----------|
| BARIUM SULFATE (TOTAL DUST) | 7727-43-7 | 10 - <30% |
| TITANIUM DIOXIDE (TOTAL DUST) | 13463-67-7 | 10 - <30% |
| TALC (RESPIRABLE DUST) | 14807-96-6 | 10 - <30% |
| XYLENE | 1330-20-7 | 1 - <10% |
| MODIFIED CYCLOALIPHATIC POLYAMINE | 68953-36-6 | 1 - <10% |
| BENZYL ALCOHOL | 100-51-6 | 1 - <10% |
| N-BUTANOL (SKIN) | 71-36-3 | 1 - <10% |
| ETHYL BENZENE | 100-41-4 | 1 - <10% |
| ISOPHORONE DIAMINE | 2855-13-2 | 1 - <10% |
| AMORPHOUS SILICA | 7631-86-9 | 1 - <10% |
| UREA RESIN | - | 0.1 - <1% |
| ALUMINUM OXIDES | 1344-28-1 | 0.1 - <1% |
| ALUMINUM HYDROXIDE | 21645-51-2 | 0.1 - <1% |
| PROPRIETARY | - | 0.1 - <1% |
| ZIRCONIUM OXIDE | 1314-23-4 | 0.1 - <1% |
| MAGNESITE | 546-93-0 | 0.1 - <1% |
| TETRAETHYLENEPENTAMINE | 112-57-2 | 0.1 - <1% |
| P-P'-ISOPROPYLIDENEDIPHENOL | 80-05-7 | 0.1 - <1% |
| BENZENE, 1,3-DIMETHYL | 108-38-3 | 0.1 - <1% |
| FORMALDEHYDE | 50-00-0 | 0 - <0.1% |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| | |
|---|--|
| General advice | If symptoms persist, call a physician. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. |
| Ingestion | If swallowed, do not induce vomiting. Get medical attention immediately. |
| Self-protection of the first aider | Use personal protective equipment. Avoid contact with eyes, skin and clothing. |

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe

fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Aldehydes. Carbon oxides. Hydrocarbons. Oxides of nitrogen.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. **MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS.** Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products Strong oxidizing agents. Acids. Bases. Cleaning solutions such as Chromerge and Aqua Regia.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--|--------------------------|--|------------|
| BARIUM SULFATE (TOTAL DUST) 7727-43-7 | TWA: 5 mg/m ³ | TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³ | |

| | | | |
|---|-------------------------------|---|------------------------|
| TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7 | TWA: 10 mg/m ³ | TWA: 10 mg/m ³ TWA: 15 mg/m ³ | 5000 mg/m ³ |
| TALC (RESPIRABLE DUST) 14807-96-6 | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ | 1000 mg/m ³ |
| XYLENE 1330-20-7 | TWA: 100 ppm STEL: 150 ppm | TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³ | |
| N-BUTANOL (SKIN) 71-36-3 | TWA: 20 ppm | Skin Ceiling: 50 ppm Ceiling: 150 mg/m ³ TWA: 100 ppm TWA: 300 mg/m ³ | 1400 ppm |
| ETHYL BENZENE 100-41-4 | TWA: 20 ppm | TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³ | 800 ppm |
| AMORPHOUS SILICA 7631-86-9 | - | TWA: 6 mg/m ³ | 3000 mg/m ³ |
| ALUMINUM OXIDES 1344-28-1 | TWA: 1 mg/m ³ | TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³ | |
| ALUMINUM HYDROXIDE 21645-51-2 | TWA: 1 mg/m ³ | - | |
| ZIRCONIUM OXIDE 1314-23-4 | TWA: 5 mg/m ³ | - | 25 mg/m ³ |
| BENZENE, 1,3-DIMETHYL 108-38-3 | TWA: 100 ppm STEL: 150 ppm | - | 900 ppm |
| FORMALDEHYDE 50-00-0 | TWA: 0.1 ppm STEL: 0.3 ppm | TWA: 3 ppm STEL: 10 ppm Ceiling: 5 ppm TWA: 0.75 ppm STEL: 2 ppm | 20 ppm |

Appropriate engineering controls**Engineering measures**

Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical state | liquid | Odor | aromatic |
| Appearance | opaque | Odor threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> |
|---|-------------------------|-----------------------------|
| pH | | |
| Melting point / freezing point | No data available | |
| Boiling point / boiling range | 116 °C / 241.0 °F | |
| Flash point | 26 °C / 78.0 °F | Pensky Martens - Closed Cup |
| Evaporation rate | | |
| Flammability (solid, gas) | No data available | |
| Flammability Limit in Air | | |
| Upper flammability limit | 12.3 | |
| Lower flammability limit | 1.5 | |
| Vapor pressure | | |
| Vapor density | | |
| Specific gravity | 1.82981 | |
| Water solubility | Insoluble in cold water | |
| Solubility in other solvents | | |
| Partition coefficient: n-octanol/water | | |
| Autoignition temperature | No data available | |
| Decomposition temperature | | |
| Kinematic viscosity | | |
| Dynamic viscosity | 1100 centipoises | approx |

Other Information

| | |
|---|--------------------------|
| Density | 15.26062 lbs/gal |
| Volatile organic compounds (VOC) content | 2.62788 lbs/gal |
| Total volatiles weight percent | 17.22 % |
| Total volatiles volume percent | 36.7 % |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Epoxy constituents.

Incompatible materials

Strong oxidizing agents, Acids, Bases, Cleaning solutions such as Chromerge and Aqua Regia

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Oxides of nitrogen. Aldehydes. Hydrocarbons. Carbon oxides.

11. TOXICOLOGICAL INFORMATION**Information on Likely Routes of Exposure**

| | |
|---------------------|--|
| Inhalation | Vapors may irritate throat and respiratory system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. |
| Eye contact | Causes serious eye damage. |
| Skin contact | Irritating to skin. May cause sensitization by skin contact. |
| Ingestion | Harmful if swallowed. |

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|--|---|
| BARIUM SULFATE (TOTAL DUST) 7727-43-7 | = 307000 mg/kg (Rat) | - | - |
| TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7 | > 10000 mg/kg (Rat) | - | - |
| XYLENE 1330-20-7 | = 3500 mg/kg (Rat) | > 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit) | = 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h |
| BENZYL ALCOHOL 100-51-6 | = 1230 mg/kg (Rat) | = 2 g/kg (Rabbit) | = 8.8 mg/L (Rat) 4 h |
| N-BUTANOL (SKIN) 71-36-3 | = 700 mg/kg (Rat) = 790 mg/kg (Rat) | = 3400 mg/kg (Rabbit) = 3402 mg/kg (Rabbit) | > 8000 ppm (Rat) 4 h |
| ETHYL BENZENE 100-41-4 | = 3500 mg/kg (Rat) | = 15400 mg/kg (Rabbit) | = 17.4 mg/L (Rat) 4 h |
| ISOPHORONE DIAMINE 2855-13-2 | = 1030 mg/kg (Rat) | - | - |
| AMORPHOUS SILICA 7631-86-9 | = 7900 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 2.2 mg/L (Rat) 1 h |
| ALUMINUM OXIDES 1344-28-1 | > 5000 mg/kg (Rat) | - | - |
| ALUMINUM HYDROXIDE 21645-51-2 | > 5000 mg/kg (Rat) | - | - |
| TETRAETHYLENEPENTAMINE 112-57-2 | = 3990 mg/kg (Rat) | = 660 µL/kg (Rabbit) | - |
| P-P'-ISOPROPYLIDENEDIPHENOL 80-05-7 | = 3300 mg/kg (Rat) | = 3 mL/kg (Rabbit) | > 170 mg/m ³ (Rat) 6 h |
| BENZENE, 1,3-DIMETHYL 108-38-3 | = 5 g/kg (Rat) | = 12.18 g/kg (Rabbit) = 14100 µL/kg (Rabbit) | = 5984 ppm (Rat) 6 h |
| FORMALDEHYDE 50-00-0 | = 100 mg/kg (Rat) | = 270 mg/kg (Rabbit) | = 0.578 mg/L (Rat) 4 h |

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

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

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Risk of serious damage to eyes.
Chronic Toxicity Skin sensitizer. Substances known to be mutagenic to man. Substances known to impair fertility. May cause cancer. Avoid repeated exposure.
Sensitization May cause sensitization of susceptible persons.
Mutagenicity No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|---|-------|---------------------|-----|------|
| TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7 | | Group 2B | - | X |
| TALC (RESPIRABLE DUST) 14807-96-6 | | Group 2B Group 3 | - | |
| XYLENE 1330-20-7 | | Group 3 | - | |
| ETHYL BENZENE 100-41-4 | A3 | Group 2B | - | X |

| | | | | |
|-----------------------------------|----|--------------------|-------|---|
| AMORPHOUS SILICA 7631-86-9 | | Group 1 Group 3 | Known | |
| BENZENE, 1,3-DIMETHYL 108-38-3 | | Group 3 | - | |
| FORMALDEHYDE 50-00-0 | A1 | Group 1 | Known | X |

Reproductive effects
STOT - single exposure
STOT - repeated exposure
Target organ effects

Suspected of damaging fertility or the unborn child.
 Eyes, Central Nervous System (CNS), Skin
 Causes damage to organs through prolonged or repeated exposure
 blood, Central nervous system, Central Vascular System (CVS), Gastrointestinal tract,
 Eyes, kidney, liver, Lungs, respiratory system, Skin.

Aspiration hazard

No information available.

Acute Toxicity

8.93713 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

11.87839 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia |
|--------------------------------------|---|---|--|
| TALC (RESPIRABLE DUST) 14807-96-6 | | 100: 96 h Brachydanio rerio g/L LC50 semi-static | |
| XYLENE 1330-20-7 | | LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26 - 40.75 mg/L Poecilia reticulata 96 h | EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h |
| BENZYL ALCOHOL 100-51-6 | 35: 3 h Anabaena variabilis mg/L EC50 | 460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static | 23: 48 h water flea mg/L EC50 |
| N-BUTANOL (SKIN) 71-36-3 | 500: 72 h Desmodosmus subspicatus mg/L EC50 500: 96 h Desmodosmus subspicatus mg/L EC50 | 1730 - 1910: 96 h Pimephales promelas mg/L LC50 static 100000 - 500000: 96 h Lepomis macrochirus µg/L LC50 static 1740: 96 h Pimephales promelas mg/L LC50 flow-through 1910000: 96 h Pimephales promelas µg/L LC50 static | 1897 - 2072: 48 h Daphnia magna mg/L EC50 Static 1983: 48 h Daphnia magna mg/L EC50 |
| ETHYL BENZENE 100-41-4 | 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static | 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static | 1.8 - 2.4: 48 h Daphnia magna mg/L EC50 |
| ISOPHORONE DIAMINE 2855-13-2 | 37: 72 h Desmodosmus subspicatus mg/L EC50 | 110: 96 h Leuciscus idus mg/L LC50 semi-static | 14.6 - 21.5: 48 h Daphnia magna mg/L EC50 semi-static 42: 24 h Daphnia magna mg/L EC50 |
| AMORPHOUS SILICA 7631-86-9 | 440: 72 h Pseudokirchneriella subcapitata mg/L EC50 | 5000: 96 h Brachydanio rerio mg/L LC50 static | 7600: 48 h Ceriodaphnia dubia mg/L EC50 |
| TETRAETHYLENAPENTAMINE | 2.1: 72 h Pseudokirchneriella | 420: 96 h Poecilia reticulata mg/L | 24.1: 48 h Daphnia magna mg/L |

| 112-57-2 | subcapitata mg/L EC50 | LC50 static | EC50 |
|---|--|---|--|
| P-P'-ISOPROPYLIDENEDIPHENOL L 80-05-7 | 2.5: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 3.6 - 5.4: 96 h Pimephales promelas mg/L LC50 flow-through 9.9: 96 h Brachydanio rerio mg/L LC50 static 4.0 - 5.5: 96 h Pimephales promelas mg/L LC50 static 4: 96 h Oncorhynchus mykiss mg/L LC50 | 10.2: 48 h Daphnia magna mg/L EC50 9.2 - 11.4: 48 h Daphnia magna mg/L EC50 Static 3.9: 48 h Daphnia magna mg/L EC50 |
| BENZENE, 1,3-DIMETHYL 108-38-3 | 4.9: 72 h Pseudokirchneriella subcapitata mg/L EC50 static | 14.3 - 18: 96 h Pimephales promelas mg/L LC50 flow-through 8.4: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 12.9: 96 h Poecilia reticulata mg/L LC50 semi-static | 2.81 - 5.0: 48 h Daphnia magna mg/L EC50 Static |
| FORMALDEHYDE 50-00-0 | | 22.6 - 25.7: 96 h Pimephales promelas mg/L LC50 flow-through 23.2 - 29.7: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Brachydanio rerio mg/L LC50 static 0.032 - 0.226: 96 h Oncorhynchus mykiss mL/L LC50 flow-through 1510: 96 h Lepomis macrochirus µg/L LC50 static 100 - 136: 96 h Oncorhynchus mykiss mg/L LC50 static | 2: 48 h Daphnia magna mg/L LC50 11.3 - 18: 48 h Daphnia magna mg/L EC50 Static |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

| Chemical name | log Pow |
|--|---------|
| XYLENE 1330-20-7 | 2.77 |
| BENZYL ALCOHOL 100-51-6 | 1.1 |
| N-BUTANOL (SKIN) 71-36-3 | 0.785 |
| ETHYL BENZENE 100-41-4 | 3.118 |
| ISOPHORONE DIAMINE 2855-13-2 | 0.79 |
| TETRAETHYLENEPENTAMINE 112-57-2 | .99 |
| P-P'-ISOPROPYLIDENEDIPHENOL 80-05-7 | 2.2 |
| BENZENE, 1,3-DIMETHYL 108-38-3 | 3.2 |
| FORMALDEHYDE 50-00-0 | 0.35 |

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal Methods**

Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

| Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|-----------------------------|------|---|------------------------|------------------------|
| XYLENE 1330-20-7 | | Included in waste stream: F039 | | U239 |
| N-BUTANOL (SKIN) 71-36-3 | | Included in waste stream: F039 | | U031 |
| ETHYL BENZENE 100-41-4 | | Included in waste stream: F039 | | |
| FORMALDEHYDE 50-00-0 | U122 | Included in waste streams: K009, K010, K038, K040, K156, K157 | | U122 |

| Chemical name | CAWAST |
|-----------------------------|--------------------|
| XYLENE 1330-20-7 | Toxic Ignitable |
| N-BUTANOL (SKIN) 71-36-3 | Toxic |
| ETHYL BENZENE 100-41-4 | Toxic Ignitable |
| FORMALDEHYDE 50-00-0 | Toxic Ignitable |

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263
 Proper Shipping Name PAINT
 Hazard Class 3
 Packing Group III
 Emergency Response Guide Number 128

Additional information

Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDSL Complies
 EINECS/ELINCS Complies
 ENCS Does Not Comply
 IECSC Complies
 KECL Complies
 PICCS Does Not Comply
 AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Chemical name HAPS Data
 XYLENE
 ETHYL BENZENE
 BENZENE, 1,3-DIMETHYL

FORMALDEHYDE

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

| Chemical name | SARA 313 - Threshold Values |
|---|-----------------------------|
| BARIUM SULFATE (TOTAL DUST) - 7727-43-7 | 1.0 |
| XYLENE - 1330-20-7 | 1.0 |
| N-BUTANOL (SKIN) - 71-36-3 | 1.0 |
| ETHYL BENZENE - 100-41-4 | 0.1 |
| ALUMINUM OXIDES - 1344-28-1 | 1.0 |
| P-P'-ISOPROPYLIDENEDIPHENOL - 80-05-7 | 1.0 |
| BENZENE, 1,3-DIMETHYL - 108-38-3 | 1.0 |
| FORMALDEHYDE - 50-00-0 | 0.1 |

SARA 311/312 Hazardous Categorization

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | Yes |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-----------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| XYLENE 1330-20-7 | 100 lb | | | X |
| ETHYL BENZENE 100-41-4 | 1000 lb | X | X | X |
| BENZENE, 1,3-DIMETHYL 108-38-3 | | | | X |
| FORMALDEHYDE 50-00-0 | 100 lb | | | X |

| Chemical name | Hazardous Substances RQs | CERCLA EHS RQs | RQ |
|-----------------------------------|--------------------------|----------------|--|
| XYLENE 1330-20-7 | 100 lb | | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| N-BUTANOL (SKIN) 71-36-3 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| ETHYL BENZENE 100-41-4 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |
| BENZENE, 1,3-DIMETHYL 108-38-3 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |
| FORMALDEHYDE 50-00-0 | 100 lb | 100 lb | RQ 100 lb final RQ RQ 45.4 kg final RQ |

California Prop. 65

WARNING: This product can expose you to the following chemicals which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

| Chemical name | California Prop. 65 |
|--|---------------------|
| TITANIUM DIOXIDE (TOTAL DUST) - 13463-67-7 | Carcinogen |
| ETHYL BENZENE - 100-41-4 | Carcinogen |
| AMORPHOUS SILICA - 7631-86-9 | Carcinogen |
| P-P'-ISOPROPYLIDENEDIPHENOL - 80-05-7 | Female Reproductive |
| BENZENE, 1,3-DIMETHYL - 108-38-3 | * |
| FORMALDEHYDE - 50-00-0 | Carcinogen |
| BENZENE, 1,4-DIMETHYL - 106-42-3 | * |
| BENZENE, 1,2-DIMETHYL - 95-47-6 | * |
| CRYSTALLINE SILICA (QUARTZ) - 14808-60-7 | Carcinogen |

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| BARIUM SULFATE (TOTAL DUST) 7727-43-7 | X | X | X |
| TITANIUM DIOXIDE (TOTAL DUST) 13463-67-7 | X | X | X |
| TALC (RESPIRABLE DUST) 14807-96-6 | X | X | X |
| XYLENE 1330-20-7 | X | X | X |
| BENZYL ALCOHOL 100-51-6 | | X | X |
| N-BUTANOL (SKIN) 71-36-3 | X | X | X |
| ETHYL BENZENE 100-41-4 | X | X | X |
| ISOPHORONE DIAMINE 2855-13-2 | X | | |
| AMORPHOUS SILICA 7631-86-9 | | X | X |
| ALUMINUM OXIDES 1344-28-1 | X | X | X |
| ZIRCONIUM OXIDE 1314-23-4 | | X | |
| MAGNESITE 546-93-0 | X | X | |
| TETRAETHYLENEPENTAMINE 112-57-2 | X | X | X |
| P-P'-ISOPROPYLDENEDIPHENOL 80-05-7 | X | X | X |
| BENZENE, 1,3-DIMETHYL 108-38-3 | X | X | X |
| FORMALDEHYDE 50-00-0 | X | X | X |

16. OTHER INFORMATION

NFPA
HMIS (Hazardous
Material Information
System)

Health 2
Health 2*

Flammability 3
Flammability 3

Instability 1
Reactivity 1

Physical hazard *

Prepared By

Tnemec Regulatory Dept: 816-474-3400

Issue Date

23-May-2017

Revision Date

10-May-2018

Revision Summary

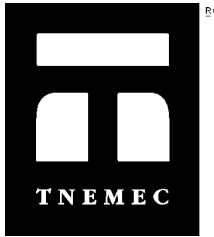
9 4 5 7 10 8 2 11 14 1 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of SDS



Safety Data Sheet

Issue Date 13-Feb-2019

Revision Date 13-Feb-2019

Revision Number 9

1. IDENTIFICATION

Product identifier

Product Code V-69-0069B
Product Name HI-BLD EPOXOLINE II CONVERTER

Other means of identification

Common Name SERIES V69/V69F, PART B
UN/ID no. 1263
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 816-474-3400
Distributor Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|-------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Skin sensitization | Category 1 |
| Carcinogenicity | Category 2 |
| Reproductive Toxicity | Category 1B |
| Specific target organ toxicity (repeated exposure) | Category 2 |
| Flammable Liquids | Category 3 |

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing cancer
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Flammable liquid and vapor

**Appearance** opaque**Physical state** liquid**Odor** aromatic**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
 Wash face, hands and any exposed skin thoroughly after handling
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ventilating/lighting/mixing/equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge

Response

IF exposed or concerned: Get medical advice/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 advice/attention
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up
 Store in a well-ventilated place. Keep cool
 Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

Other information

Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET

Acute Toxicity

39.207381 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name | CAS No | Weight-% |
|--------------------------|------------|-----------|
| TALC (RESPIRABLE DUST) | 14807-96-6 | 30 - <60% |
| EPOXY RESIN (LER) | 25085-99-8 | 10 - <30% |
| P-CHLOROBENZOTRIFLUORIDE | 98-56-6 | 10 - <30% |
| SOLID EPOXY RESIN | - | 10 - <30% |

| | | |
|-----------------------------|-----------|-----------|
| BARIUM SULFATE (TOTAL DUST) | 7727-43-7 | 1 - <10% |
| XYLENE | 1330-20-7 | 1 - <10% |
| ETHYL BENZENE | 100-41-4 | 1 - <10% |
| METHYL ISOBUTYL KETONE | 108-10-1 | 0.1 - <1% |
| BENZENE, 1,4-DIMETHYL | 106-42-3 | 0.1 - <1% |
| BENZENE, 1,3-DIMETHYL | 108-38-3 | 0.1 - <1% |
| BENZENE, 1,2-DIMETHYL | 95-47-6 | 0.1 - <1% |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| | |
|---|--|
| General advice | If symptoms persist, call a physician. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately. |
| Inhalation | Remove to fresh air. Oxygen or artificial respiration if needed. |
| Ingestion | If swallowed, do not induce vomiting. Get medical attention immediately. |
| Self-protection of the first aider | Use personal protective equipment. Avoid contact with eyes, skin and clothing. |

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Aldehydes. Carbon oxides. Hydrocarbons. Chlorine. Fluorine.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products Acids. Bases. Amines. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--|-------------------------------|--|------------------------|
| TALC (RESPIRABLE DUST) 14807-96-6 | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ | 1000 mg/m ³ |
| P-CHLOROBENZOTRIFLUORIDE 98-56-6 | TWA: 2.5 mg/m ³ | - | 250 mg/m ³ |
| BARIUM SULFATE (TOTAL DUST) 7727-43-7 | TWA: 5 mg/m ³ | TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³ | |
| XYLENE 1330-20-7 | TWA: 100 ppm STEL: 150 ppm | TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³ | |
| ETHYL BENZENE 100-41-4 | TWA: 20 ppm | TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³ | 800 ppm |
| METHYL ISOBUTYL KETONE 108-10-1 | TWA: 20 ppm STEL: 75 ppm | TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm STEL: 300 mg/m ³ TWA: 100 ppm TWA: 410 mg/m ³ | 500 ppm |
| BENZENE, 1,4-DIMETHYL | TWA: 100 ppm | - | 900 ppm |

| | | | |
|-----------------------------------|-------------------------------|---|---------|
| 106-42-3 | STEL: 150 ppm | | |
| BENZENE, 1,3-DIMETHYL 108-38-3 | TWA: 100 ppm STEL: 150 ppm | - | 900 ppm |
| BENZENE, 1,2-DIMETHYL 95-47-6 | TWA: 100 ppm STEL: 150 ppm | - | 900 ppm |

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical state | liquid | Odor | aromatic |
| Appearance | opaque | Odor threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> |
|---|-------------------------|-----------------------------|
| pH | | |
| Melting point / freezing point | No data available | |
| Boiling point / boiling range | 135 °C / 275.0 °F | |
| Flash point | 30 °C / 86.0 °F | Pensky Martens - Closed Cup |
| Evaporation rate | | No data available |
| Flammability (solid, gas) | No data available | |
| Flammability Limit in Air | | |
| Upper flammability limit | N/A | |
| Lower flammability limit | 1.0 | |
| Vapor pressure | | |
| Vapor density | | |
| Specific gravity | 1.52967 | g/cm3 |
| Water solubility | Insoluble in cold water | |
| Solubility in other solvents | | |
| Partition coefficient: n-octanol/water | | |
| Autoignition temperature | No data available | |
| Decomposition temperature | | |
| Kinematic viscosity | | |
| Dynamic viscosity | 1100 centipoises | approx |

Other Information

| | |
|---|------------------|
| Density | 12.75748 lbs/gal |
| Volatile organic compounds (VOC) | 1.12971 lbs/gal |

| | |
|---------------------------------------|--------------------------|
| content | |
| Total volatiles weight percent | 22 % |
| Total volatiles volume percent | 29.86 % |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Amines.

Incompatible materials

Acids, Bases, Amines, Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Chlorine. Fluorine. Aldehydes. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

| | |
|---------------------|---|
| Inhalation | May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. |
| Eye contact | Causes serious eye irritation. |
| Skin contact | Irritating to skin. May cause sensitization by skin contact. |
| Ingestion | Harmful if swallowed. |

| Chemical name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--|------------------------|---|--|
| P-CHLOROBENZOTRIFLUORIDE 98-56-6 | = 13 g/kg (Rat) | > 2 mL/kg (Rabbit) | = 33 mg/L (Rat) 4 h |
| BARIUM SULFATE (TOTAL DUST) 7727-43-7 | = 307000 mg/kg (Rat) | - | - |
| XYLENE 1330-20-7 | = 3500 mg/kg (Rat) | > 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit) | = 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h |
| ETHYL BENZENE 100-41-4 | = 3500 mg/kg (Rat) | = 15400 mg/kg (Rabbit) | = 17.4 mg/L (Rat) 4 h |
| METHYL ISOBUTYL KETONE 108-10-1 | = 2080 mg/kg (Rat) | = 3000 mg/kg (Rabbit) | = 8.2 mg/L (Rat) 4 h |
| BENZENE, 1,4-DIMETHYL 106-42-3 | = 4029 mg/kg (Rat) | - | = 4550 ppm (Rat) 4 h = 4740 ppm (Rat) 4 h |
| BENZENE, 1,3-DIMETHYL 108-38-3 | = 5 g/kg (Rat) | = 12.18 g/kg (Rabbit) = 14100 µL/kg (Rabbit) | = 5984 ppm (Rat) 6 h |
| BENZENE, 1,2-DIMETHYL 95-47-6 | = 3608 mg/kg (Rat) | = 14100 mg/kg (Rabbit) | = 4330 ppm (Rat) 6 h |

Information on toxicological effects

Symptoms

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Chronic 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. Substances known to impair fertility. May cause cancer. Skin sensitizer.

Sensitization

May cause sensitization of susceptible persons.

Mutagenicity

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|---------------------------------------|-------|----------|-----|------|
| TALC (RESPIRABLE DUST) 14807-96-6 | | Group 3 | - | |
| XYLENE 1330-20-7 | | Group 3 | - | |
| ETHYL BENZENE 100-41-4 | A3 | Group 2B | - | X |
| METHYL ISOBUTYL KETONE 108-10-1 | A3 | Group 2B | - | X |
| BENZENE, 1,4-DIMETHYL 106-42-3 | | Group 3 | - | |
| BENZENE, 1,3-DIMETHYL 108-38-3 | | Group 3 | - | |
| BENZENE, 1,2-DIMETHYL 95-47-6 | | Group 3 | - | |

Reproductive effects

May damage fertility or the unborn child.

STOT - single exposure

No information available

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure

Target organ effects

blood, Central nervous system, Central Vascular System (CVS), Gastrointestinal tract, Eyes, kidney, liver, respiratory system, Skin.

Aspiration hazard

No information available.

Acute Toxicity

39.207381 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

29.40098 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia |
|--------------------------------------|--|---|---|
| TALC (RESPIRABLE DUST) 14807-96-6 | | 100: 96 h Brachydanio rerio g/L LC50 semi-static | |
| EPOXY RESIN (LER) 25085-99-8 | 11 mg/L 72 hr | 2 mg/L 96 hr Oncorhynchus mykiss | 1.8 mg/L 48h |
| P-CHLOROBENZOTRIFLUORIDE 98-56-6 | | 11.5 - 15.8: 48 h Lepomis macrochirus mg/L LC50 static | 3.68: 48 h Daphnia magna mg/L EC50 |
| XYLENE 1330-20-7 | | LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50> 780 mg/L Cyprinus carpio 96 h LC50 30.26 - 40.75 mg/L Poecilia reticulata 96 h | EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h |
| ETHYL BENZENE 100-41-4 | 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 4.6: 72 h Pseudokirchneriella | 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 | 1.8 - 2.4: 48 h Daphnia magna mg/L EC50 |

| | | | |
|------------------------------------|---|--|---|
| | subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static | semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static | |
| METHYL ISOBUTYL KETONE 108-10-1 | 400: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through | 170: 48 h Daphnia magna mg/L EC50 |
| BENZENE, 1,4-DIMETHYL 106-42-3 | 3.2: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 105.1: 3 h Chlorella vulgaris mg/L EC50 | 2.6: 96 h Oncorhynchus mykiss mg/L LC50 7.2 - 9.9: 96 h Pimephales promelas mg/L LC50 static 2.6: 96 h Oncorhynchus mykiss mg/L LC50 static 8.8: 96 h Poecilia reticulata mg/L LC50 semi-static | 3.55 - 6.31: 48 h Daphnia magna mg/L EC50 Static |
| BENZENE, 1,3-DIMETHYL 108-38-3 | 4.9: 72 h Pseudokirchneriella subcapitata mg/L EC50 static | 14.3 - 18: 96 h Pimephales promelas mg/L LC50 flow-through 8.4: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 12.9: 96 h Poecilia reticulata mg/L LC50 semi-static | 2.81 - 5.0: 48 h Daphnia magna mg/L EC50 Static |
| BENZENE, 1,2-DIMETHYL 95-47-6 | 4.7: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 4.2: 192 h Pseudokirchneriella subcapitata mg/L EC50 | 11.6 - 22.4: 96 h Pimephales promelas mg/L LC50 flow-through 12: 96 h Poecilia reticulata mg/L LC50 5.59 - 11.6: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 11.6 - 22.4: 96 h Lepomis macrochirus mg/L LC50 flow-through | 3.2: 48 h Daphnia magna mg/L EC50 0.78 - 2.51: 48 h Daphnia magna mg/L EC50 Static 2.61 - 5.59: 48 h Daphnia magna mg/L EC50 Flow through |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

| Chemical name | log Pow |
|-------------------------------------|---------|
| EPOXY RESIN (LER) 25085-99-8 | 3 |
| P-CHLOROBENZOTRIFLUORIDE 98-56-6 | 3.7 |
| XYLENE 1330-20-7 | 2.77 |
| ETHYL BENZENE 100-41-4 | 3.118 |
| METHYL ISOBUTYL KETONE 108-10-1 | 1.19 |
| BENZENE, 1,4-DIMETHYL 106-42-3 | 3.15 |
| BENZENE, 1,3-DIMETHYL 108-38-3 | 3.2 |
| BENZENE, 1,2-DIMETHYL 95-47-6 | 3.12 |

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal Methods**

Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

| Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------------------------|------|-----------------------------------|------------------------|------------------------|
| XYLENE 1330-20-7 | | Included in waste stream: F039 | | U239 |
| ETHYL BENZENE 100-41-4 | | Included in waste stream: F039 | | |
| METHYL ISOBUTYL KETONE 108-10-1 | | Included in waste stream: F039 | | U161 |

| Chemical name | CAWAST |
|---------------------------|--------------------|
| XYLENE 1330-20-7 | Toxic Ignitable |
| ETHYL BENZENE 100-41-4 | Toxic Ignitable |

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263
Proper Shipping Name PAINT
Hazard Class 3
Packing Group III
Emergency Response Guide Number 128

Additional information

Call TNE MEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Does Not Comply
ENCS Does Not Comply
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

| Chemical name | HAPS Data |
|------------------------|-----------|
| XYLENE | |
| ETHYL BENZENE | |
| METHYL ISOBUTYL KETONE | |
| BENZENE, 1,4-DIMETHYL | |
| BENZENE, 1,3-DIMETHYL | |
| BENZENE, 1,2-DIMETHYL | |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

| Chemical name | SARA 313 - Threshold Values |
|---|-----------------------------|
| BARIUM SULFATE (TOTAL DUST) - 7727-43-7 | 1.0 |
| XYLENE - 1330-20-7 | 1.0 |
| ETHYL BENZENE - 100-41-4 | 0.1 |
| METHYL ISOBUTYL KETONE - 108-10-1 | 1.0 |
| BENZENE, 1,4-DIMETHYL - 106-42-3 | 1.0 |
| BENZENE, 1,3-DIMETHYL - 108-38-3 | 1.0 |
| BENZENE, 1,2-DIMETHYL - 95-47-6 | 1.0 |

SARA 311/312 Hazardous**Categorization**

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | Yes |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-----------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| XYLENE 1330-20-7 | 100 lb | | | X |
| ETHYL BENZENE 100-41-4 | 1000 lb | X | X | X |
| BENZENE, 1,4-DIMETHYL 106-42-3 | | | | X |
| BENZENE, 1,3-DIMETHYL 108-38-3 | | | | X |
| BENZENE, 1,2-DIMETHYL 95-47-6 | | | | X |

| Chemical name | Hazardous Substances RQs | CERCLA EHS RQs | RQ |
|------------------------------------|--------------------------|----------------|--|
| XYLENE 1330-20-7 | 100 lb | | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| ETHYL BENZENE 100-41-4 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |
| METHYL ISOBUTYL KETONE 108-10-1 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| BENZENE, 1,4-DIMETHYL 106-42-3 | 100 lb | | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| BENZENE, 1,3-DIMETHYL 108-38-3 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |
| BENZENE, 1,2-DIMETHYL 95-47-6 | 1000 lb | | RQ 1000 lb final RQ RQ 454 kg final RQ |

California Prop. 65

WARNING: This product can expose you to the following chemicals which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

| Chemical name | California Prop. 65 |
|-----------------------------------|-----------------------------|
| ETHYL BENZENE - 100-41-4 | Carcinogen |
| METHYL ISOBUTYL KETONE - 108-10-1 | Carcinogen Developmental |

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|------------------------|------------|---------------|--------------|
| TALC (RESPIRABLE DUST) | X | X | X |

| | | | |
|--|---|---|---|
| 14807-96-6 | | | |
| P-CHLOROBENZOTRIFLUORIDE 98-56-6 | X | | |
| BARIUM SULFATE (TOTAL DUST) 7727-43-7 | X | X | X |
| XYLENE 1330-20-7 | X | X | X |
| ETHYL BENZENE 100-41-4 | X | X | X |
| METHYL ISOBUTYL KETONE 108-10-1 | X | X | X |
| BENZENE, 1,4-DIMETHYL 106-42-3 | X | X | X |
| BENZENE, 1,3-DIMETHYL 108-38-3 | X | X | X |
| BENZENE, 1,2-DIMETHYL 95-47-6 | X | X | X |

16. OTHER INFORMATION

NFPA Health 2 Flammability 3 Instability 1 Physical hazard *
HMIS (Hazardous Material Information System) Health 2* Flammability 3 Reactivity 1

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 9 4 5 7 10 8 11 14

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of SDS