



Material Safety Data Sheet

Issuing Date 16-May-2011

Revision Date

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name HPS-3Y-002
Product Code(s) 999322
Recommended Use Epoxy resin
Product Technology Epoxy

Supplier Address

Ennis Paint Inc.
5910 North Central Expressway
Suite 1050
Dallas TX 75206
T: 800.331.8118
800.331.8118 (For Technical Inquiries)

Chemical Emergency Phone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Irritating to eyes, respiratory system and skin
May produce an allergic reaction

This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Appearance Yellow

Physical State Viscous liquid.

Odor Amine

Potential Health Effects

Acute Toxicity

| | |
|-------------------|---|
| Eyes | Irritating to eyes. |
| Skin | Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| Inhalation | Irritating to respiratory system. |
| Ingestion | Ingestion may cause irritation to mucous membranes. |

Chronic Effects

Repeated contact may cause allergic reactions in very susceptible persons. This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

Aggravated Medical Conditions

Pre-existing eye disorders. Skin disorders. Respiratory disorders.

Interactions with Other Chemicals

Irritants. Sensitizers. Epoxies.

Environmental Hazard

See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|---------------------------------------|------------|----------|
| Bisphenol A - Epichlorohydrin polymer | 25068-38-6 | 60-100 |
| Trimethylolpropane triacrylate | 15625-89-5 | 15-40 |
| Titanium dioxide | 13463-67-7 | 10-30 |

4. FIRST AID MEASURES

| | |
|-----------------------------------|---|
| 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 plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Consult a physician. |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. Administer oxygen if breathing is difficult. Seek immediate medical attention/advice. |
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. |
| Notes to Physician | Treat symptomatically. May cause sensitization of susceptible persons. |
| Protection of First-aiders | Avoid contact with skin, eyes and clothing. |

5. FIRE-FIGHTING MEASURES

| | | | | |
|--|--|-----------------------|--------------------------|--|
| Flammable Properties | Not flammable. | | | |
| Flash Point | 206.6°F / 97°C | | | |
| Suitable Extinguishing Media | Use: Water spray. Carbon dioxide (CO ₂). Foam. Dry powder. | | | |
| Hazardous Combustion Products | Carbon monoxide. Carbon dioxide (CO ₂). Phenols. | | | |
| Explosion Data | | | | |
| Sensitivity to Mechanical Impact | None | | | |
| Sensitivity to Static Discharge | None | | | |
| Specific Hazards Arising from the Chemical | Containers may explode when heated. | | | |
| Protective Equipment and Precautions for Firefighters | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. | | | |
| NFPA | Health Hazard 2 | Flammability 1 | Instability 0 | Physical and Chemical Hazards * |
| HMIS | Health Hazard 2* | Flammability 1 | Physical Hazard 0 | Personal Protection - |

6. ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------|---|
| Personal Precautions | Use personal protective equipment. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. |
| Environmental Precautions | Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. |
| Methods for Containment | Dike far ahead of liquid spill for later disposal. |
| Methods for Cleaning Up | Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. |

7. HANDLING AND STORAGE

| | |
|-----------------|--|
| Handling | Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. |
| Storage | Keep container tightly closed in a dry and well-ventilated place. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------|---------------------------|--|------------------------------|
| Titanium dioxide 13463-67-7 | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust | IDLH: 5000 mg/m ³ |

OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures Showers. Eyewash stations. Ventilation systems.

Personal Protective Equipment

Eye/Face Protection Goggles.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-----------------------------------|---------------------------|------------------------------------|---------------------------|
| Appearance | Yellow. | Odor | Amine. |
| Odor Threshold | No information available | Physical State | Viscous liquid |
| pH | No information available. | | |
| Flash Point | 206.6°F / 97°C | Autoignition Temperature | No information available. |
| Decomposition Temperature | No information available. | Boiling Point/Boiling Range | No information available |
| Melting Point/Range | No information available | | |
| Flammability Limits in Air | No information available. | Explosion Limits | No information available. |
| Solubility | No information available. | Evaporation Rate | No information available |
| Vapor Pressure | No data available | Vapor Density | No data available |
| VOC Content (%) | 0.0529 | | |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability | Stable under recommended storage conditions. |
| Incompatible Products | Oxidizing or reducing agents. |
| Conditions to Avoid | Excessive heat. |
| Hazardous Decomposition Products | Nitrogen oxides (NO _x). Carbon monoxide (CO). Carbon dioxide (CO ₂). |
| Hazardous Polymerization | Polymerization may occur when exposed to excessive heating and incompatibles. |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Irritating to eyes and skin.

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------------------------|-----------------------|-------------------------|--------------------------|
| Titanium dioxide | > 10000 mg/kg (Rat) | | > 6820 mg/m ³ |
| Bisphenol A - Epichlorohydrin polymer | 11400 mg/kg (Rat) | | |
| Trimethylolpropane triacrylate | = 5190 µL/kg (Rat) | = 5000 mg/kg (Rabbit) | |

Chronic Toxicity

Chronic Toxicity Repeated contact may cause allergic reactions in very susceptible persons. This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|------------------|-------|----------|-----|------|
| Titanium dioxide | | Group 2B | | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A4 - Not Classifiable as a Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Target Organ Effects Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

| | |
|-----------------|---------------|
| <u>DOT</u> | Not regulated |
| <u>TDG</u> | Not regulated |
| <u>MEX</u> | Not regulated |
| <u>ICAO</u> | Not regulated |
| <u>IATA</u> | Not regulated |
| <u>IMDG/IMO</u> | Not regulated |

15. REGULATORY INFORMATION

International Inventories

| | |
|-------------|--|
| TSCA | All components are listed on the TSCA Inventory. |
| DSL | All components are listed either on the DSL or NDSL. |

Legend

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

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

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|------------------|------------|---------------|--------------|----------|--------------|
| Titanium dioxide | X | X | X | - | X |

International Regulations

Mexico - Grade Slight risk, Grade 1

| Chemical Name | Carcinogen Status | Exposure Limits |
|------------------|-------------------|---|
| Titanium dioxide | | Mexico: TWA= 10 mg/m ³ Mexico: STEL= 20 mg/m ³ |

Canada

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

WHMIS Hazard Class

D2A Very toxic materials
D2B Toxic materials

**Legend**

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date 16-May-2011

Revision Date

Revision Note Initial Release.

General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and it does not purport to be all inclusive and shall be used only as a guide. We urge each customer or recipient of this MSDS to study it carefully to become aware of and understand the potential hazards associated with the product. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. Any use of the product not in conformance with this MSDS or in combination with any other product or process is the responsibility of the user. Customary precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove all soiled and contaminated clothing immediately.

End of Safety Data Sheet