MATERIAL SAFETY DATA SHEET

Revision 1

Prepared 2014-06-02

Section 1 - Chemical Product and Company Information

8746 White Enamel Product Code: 8746 Product Name:

TradeName(s): Glyptal 8746

IN CASE OF EMERGENCY: Manufactured by:

CHEMTREC 1-800-424-9300

GLYPTAL, INC. 305 Eastern Ave. Chelsea, MA 02150 Telephone (617) 884-6918

Section 2 - Composition / Information on Ingredients

ACGIH Exposure Limits Chemical Name / CAS No OSHA Exposure Limits Other Exposure Limits TLV 100 ppm - TWA Aliphatic Hydrocarbons (Stoddard) PEL 500 ppm - TWA 8052-41-3 VPEL 100 ppm - TWA 10 to 20% Vapor Pressure: 2 mm Hg @ 60 F PEL 500 ppm - TWA TLV 200 mg/m3 - TWA Petroleum Distillates, hydrotreated light (skin) 64742-47-8 10 to 20% Vapor Pressure: 4 mm Hg @ 68 F Zinc Oxide PEL 15 mg/m3 TWA (Total TLV 10 mg/m3 TWA (Total 1314-13-2 Dust) Dust) PEL 5 mg/m3 TWA PEL 2 mg/m3 TWA 1 to 5% (Respirable Dust) (Respirable Dust) N/A N/A Dipentene 68956-56-9 1 to 5% Vapor Pressure: 2 mm Hg @ 20 C

Section 3 - Hazards Identification

NFPA Raings, risk phrases, and suggested WHMIS Hazard Categories:



HMIS Rating: 2 - 2 - 0

Routes of Entry:

Inhalation Skin Contact **Eye Contact** Ingestion

Exposure to this material may affect the following organs: Central Nervous System Skin Lungs

Effects of Overexposure Zinc Oxide

Effects of Overexposure Zinc Oxide

Inhalation Inhalation of high levels of zinc oxide may result in tightness of chest, metallix tast,

dizziness, fever, chills, headache, nausea, and dry throat. Overexposure may produce symptoms known as metal fume fever or "zinc shakes"; an acute self-limiting condition without recognized complications. Symptoms of metal fume fever include: chills, fever,

muscular pain, nausea and vomiting.

Effects of Overexposure Petroleum Distillates, hydrotreated light

Eye Contact May cause temporary discomfort or irritation to the eye.

Ingestion Liquid can directly enter the lungs (aspiration) when swallowed or vomited. Serious lung

damage and possibly fatal chemical pneumonia (chemical pneumonitis) can develop if this

occurs.

Inhalation Toxic and harmful if inhaled. Breathing of high vapor concentrations may cause central

nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and

death.

Skin Contact May be slightly irritating to the skin. Prolonged or repeated skin contact can cause defatting

and drying of the skin which may result in a burning sensation and a dried, cracked

appearance.

Effects of Overexposure Dipentene

Skin Contact

Eye Contact Irritant, may cause burning, redness, pain.

Ingestion Harmful if ingested, gastrointestinal irritation. Abdominal pain, nausea, vomiting, dizziness. Irritant to respiratory tract, sore throat, coughing, shortness of breath, dizziness, nausea.

Irritant, may cause temporary redness. Mild local irritation and sensitization. Intensive or

continuous contact with skin may cause dermatitis.

Effects of Overexposure Aliphatic Hydrocarbons (Stoddard)

Signs of symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough) stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of

coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), respiratory

failure, coma.

Eye Contact May cause mild irritation. Symptoms include stinging, tearing, and redness.

Ingestion Swallowing small amounts of this material during normal handling is not likely to cause

harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing oar vomiting. This results in lung inflammation and other lung injury.

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be

harmful. Symptoms are not expected at air concentrations below the recommended

exposure limits.

Skin Contact Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may

include redness, burning, drying and cracking of skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful

effects during safe handling and use.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing).

N/A

Inhalation

Section 4 - First Aid Measures

8746 Page 2 of 7

INHALATION - Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room, or physician as further medical treatment may be necessary. Administer oxygen if a qualified operator is available.

EYE CONTACT - In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. If irritation persists, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

SKIN CONTACT - In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water. If symptoms persist, contact a poison control center, emergency room, or physician as further medical treatment may be necessary.

INGESTION - If material is ingested, seek immediate medical attention. Do not induce vomiting. If vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. Contact a poison control center, emergency room, or physician as further medical treatment will be necessary.

Section 5 - Fire Fighting Measures

Flash Point: 41 C (105 F) Autoignition: Will not occur.

LEL: 1.0 % UEL: 7.0 %

EXTINGUISHING MEDIA: Use carbon dioxide (CO2), "alcohol" foam, dry chemical

UNUSUAL FIRE OR EXPLOSION HAZARDS: The product vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Closed containers may explode or burst when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat.

HAZARDOUS COMBUSTION PRODUCTS: See section 10 for a list of hazardous decomposition products for this mixture.

FIRE FIGHTING: Water spray may be ineefective. If water is used, fog nozzles are prefereable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

FIRE FIGHTING EQUIPMENT: Firemen and emergency responders: wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

SPILL AND LEAK PROCEDURES: Spill supervisor - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

8746 Page 3 of 7

SMALL SPILLS: Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

LARGE SPILLS: Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas.

Ventilate the contaminated area. Using nonsparking tools, mix the appropriate sorbent into the spilled material. Use an absorbent like sawdust for aqueous, waterborne, and solvent-borne coatings.

Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes.

Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 7 - Handling and Storage

HANDLING PRECAUTIONS: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperatures, i.e., 50 to 85 F (10 to 30 C).

STORAGE: Prevent from freezing. Do not store above 95 F (35 C).

Store only in original containers.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No 8052-41-3	OSHA Exposure Limits PEL 500 ppm - TWA VPEL 100 ppm - TWA	ACGIH Exposure Limits TLV 100 ppm - TWA	Other Exposure Limits
64742-47-8	PEL 500 ppm - TWA	TLV 200 mg/m3 - TWA (skin)	
1314-13-2	PEL 15 mg/m3 TWA (Total Dust) PEL 5 mg/m3 TWA (Respirable Dust) N/A	TLV 10 mg/m3 TWA (Total Dust) PEL 2 mg/m3 TWA (Respirable Dust) N/A	
68956-56-9			

8746 Page 4 of 7 6/2/2014 7:46:28PM

ENGINEERING: Provide general dilution of local exhaust ventilation in volume and pattern to keep concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

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).

Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the workplace. Use explosion-proof equipment and good manufacturing practice.

VENTILATION: Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Refer to OSHA standards 1910.94, 1910.107, 1910.108.

PERSONAL PROTECTIVE EQUIPMENT

EYES:

Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles.

PROTECTIVE GLOVES:

Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. If necessary, wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material.

RESPIRATORY PROTECTION:

Respiratory protection may not be needed if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. Where ventilation is inadequate, use a NIOSH/MSHA-approved, air-purifying respirator equipped with the appropriate chemical cartridges or positive-pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance White Liquid

Odor Solvent odor

Physical State Liquid

Vapor Density Heavier than air

Vapor Density 2.85

Vapor Pressure 2.9 mm Hg @ 60 F

Evaporation Rate Slower than ether

Boiling Range 157 to 270 °C

Specific Gravity (SG) 1.253 Lbs VOC/Gallon Solids 4.8

Lbs VOC/Gallon Less Water and 2.76

Exempt Solvent

Section 10 - Stability and Reactivity

Stability:

Components of this mixture are incompatible with the following materials:

8746 Page 5 of 7 6/2/2014 7:46:28PM

Strong oxidizing agents, acids, and alkali/base/caustic solutions Strong oxidizing agents

This mixture is likely to exhibit the following combustion products:

Carbon Dioxide, Carbon Monoxide

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

LC 50: Aliphatic Hydrocarbons (Stoddard)- N/A

LD 50: Aliphatic Hydrocarbons (Stoddard)- N/A

LC 50: Low Odor Paraffinic Solvent- Inhalation: Acute: >2500 ppm for 4 hours (Rat)

LD 50: Low Odor Paraffinic Solvent- Oral: >8000 mg/kg (Rat) / Skin: Acute: 4000 mg/kg (Rabbit)

LD 50: Dipentene- Oral: >2000 mg/kg (Rat); Dermal: 500 mg/kg (Rabbit, 24 h)

Section 12 - Ecological Information

Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

Section 14 - Transport Information

This material is classified for transport as follows:

Agency Proper Shipping Name UN Number Packing Group HazardClass

DOT Paint 1263 III 3

Section 15 - Regulatory Information

Additional regulatory listings, where applicable.

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- None

Commonwealth of Massachusetts "Right to Know": This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

Aliphatic Hydrocarbons (Stoddard) 10 to 20 %

8746 Page 6 of 7

New Jersey Worker and Community Right To Know Hazardous Substance List: The following substances appear on the New Jersey Right To Know Hazardous Substance List.

Aliphatic Hydrocarbons (Stoddard) 10 to 20 %

Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List: 8052-41-3

WHMIS Classification B2 Flammable Liquid / D2A Very Toxic Material

- None

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

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 40 of the Code of Federal Regulations, part 372.

1314-13-2 Zinc Oxide 1.0 - 5%

Section 16 - Other Information

NON-WARRANTY. The information presented in this publication is based upon the research and experience of Glyptal, Inc. No representation or warranty is made concerning the accuracy or completeness of the information presented in this publication. Glyptal, Inc. makes no warranty or representation of any kind, express or implied, including without limitation any warranty of merchantability or fitness for any particular purpose, and no warranty or representation shall be implied by law or otherwise. Any products sold by Glyptal, Inc. are not warranted as suitable for any particular purpose to the buyer. The suitability of any products for any purpose particular to the buyer is for the buyer to determine. Glyptal, Inc. shall in no event be liable for any special, incidental, or consequential damages. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Glyptal, Inc., and to recommend precautionary measures for the storage and handling of the products. No liability can be assumed for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

8746 Page 7 of 7