



Material Safety Data Sheet

CHEMTREC Transportation Emergency Phone:
800-424-9300
Pittsburgh Poison Control Center Health
Emergency No.: 412-681-6669

NOTE: The CHEMTREC Transportation Emergency Phone is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals

1. Identification

Product Name: THERMO-LAG E100 S PART A **Revision Date:** 12/3/2013

Identification Number: NC27A1NL **Supersedes Date:** 11/12/2013

Product Use/Class: FOR INDUSTRIAL USE ONLY

Manufacturer: Carboline Company
 2150 Schuetz Road
 St. Louis, MO 63146
 800-848-4645 **Preparer:** Regulatory Department

2. Hazard Identification

EMERGENCY OVERVIEW: Irritating to eyes and skin. This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. May cause allergic skin reaction. Harmful if swallowed. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. **WARNING! - FLAMMABLE LIQUID AND VAPOUR.** Use with adequate ventilation. Keep container closed. Harmful if inhaled. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness. Wash thoroughly after handling.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation. May cause allergic skin reaction. May cause sensitization by skin contact.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Vapours may be irritating to eyes, nose, throat, and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

MEDICAL CONDITIONS PRONE TO AGGRAVATION: Skin disorders. Allergies.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Contact

3. Composition/Information On Ingredients

Hazardous Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
EPOXY RESIN	25068-38-6	35.0	N/E	N/E	N/E	N/E
PENTAERYTHRITOL	115-77-5	20.0	10 MG/M3	N/E	5 MGM3	N/E
MELAMINE PYROPHOSPHATE	15541-60-3	15.0	N/E	N/E	N/E	N/E
TITANIUM DIOXIDE	13463-67-7	10.0	10 MGM3	N/E	10 MGM3	N/E
TOLUENE	108-88-3	5.0	20 PPM	N/E	375 MGM3	N/E
ACRYLATE MONOMER	15625-89-5	5.0	N/E	N/E	N/E	N/E
GLASS OXIDE	65997-17-3	5.0	1 FIBERS/CM3	N/E	N/E	N/E

FLY ASH	68131-74-8	5.0	10.00 MG/M3	N/E	10.00 MG/M3	N/E
ALUMINA	1344-28-1	5.0	1 MGM3	N/E	5 MGM3	N/E

4. First-aid Measures

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER SKIN CONTACT: If skin irritation persists, call a physician. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

5. Fire-fighting Measures

Flash Point, °F: 95F (35C) **Lower Explosive Limit, %:** 1.1
(Setaflash) **Upper Explosive Limit, %:** 12.7

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Wear shoes with conductive soles. Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards.

SPECIAL FIREFIGHTING PROCEDURES: In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

6. Accidental Release Measures

PERSONAL SAFETY MEASURES/ENVIRONMENTAL MEASURES/METHOD OF CLEANING/CONTAINMENT: Do not allow material to contaminate ground water system. Prevent product from entering drains. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Evacuate personnel to safe areas. Wear personal protective equipment. For personal protection see section 8. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

7. Handling and Storage

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Prepare the working solution as given on the label(s) and/or the user instructions. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Wash thoroughly after handling. Do not breathe vapours or spray mist.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

RESPIRATORY PROTECTION: Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required. In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator.

SKIN PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing.

EYE PROTECTION: Safety glasses with side-shields

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Boiling Range:	201 F (94 C) - 601 F (316 C)	Vapor Density:	Heavier than Air
Odor:	Epoxy	Odor Threshold:	N/D
Appearance:	Viscous, White Liquid	Evaporation Rate:	Slower Than Ether
Solubility in Water:	N/D	Specific Gravity:	1.399
Freeze Point:	N/D	pH:	N/D
Physical State:	Liquid	Vapor Pressure:	No Information

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Heat, flames and sparks.

MATERIALS TO AVOID: Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

STABILITY: Stable under normal conditions.

11. Toxicological Information

Chemical Name	CAS-No.	LD50	LC50
EPOXY RESIN	25068-38-6	30000 mg/kg, rat, oral	>20 mL/kg skin, sensitizer
PENTAERYTHRITOL	115-77-5	25500 mg/kg, oral, rat	Not Available
MELAMINE PYROPHOSPHATE	15541-60-3	>5000 mg/kg, oral, rat	Not Available
TITANIUM DIOXIDE	13463-67-7	25000 mg/m ³ , oral (rat)	6.82 mg/L, Inh, rat 4H
TOLUENE	108-88-3	5000 mg/kg rat oral, 14000 mg/kg rabbit dermal	8000 ppm/4 hrs, rat, inhalation
ACRYLATE MONOMER	15625-89-5	5000 mg/kg, oral, rat	Not Available
GLASS OXIDE	65997-17-3	Not Available	Not Available
FLY ASH	68131-74-8	Not Available	Not Available
ALUMINA	1344-28-1	Not Available	Not Available

12. Ecological Information

ECOLOGICAL INFORMATION: No information available.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of in accordance with local regulations.

14. Transport Information

DOT Proper Shipping Name:	Paint	Packing Group:	III
DOT Technical Name:	N/A	Hazard Subclass:	N/A
DOT Hazard Class:	3	Resp. Guide Page:	128
DOT UN/NA Number:	UN1263		
Additional Notes:	No Information		

15. Regulatory Information**U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
TOLUENE	108-88-3

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS-No.</u>
MELAMINE	108-78-1

Pennsylvania Right-To-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS-No.</u>
MELAMINE	108-78-1

CALIFORNIA PROPOSITION 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Chemical Name</u>	<u>CAS-No.</u>
----------------------	----------------

TITANIUM DIOXIDE	13463-67-7
MICROCRYSTALLINE SILICA	14808-60-7

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS-No.</u>
TOLUENE	108-88-3

International Regulations:

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: B2, D2A, D2B

16. Other Information

HMIS Ratings:

Health: 2 Flammability: 3 Reactivity: 1 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 64

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.