

product plus and aliphatic amine will cause irreversible polymerization with considerable heat build-up.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Soak up in non-reactive absorbent material or scrape up. The residue can be removed with hot soapy water. Use of methylene chloride, acetone, or aromatic solvents in clean up poses a distinct hazard and therefore, should be avoided.

DISPOSAL METHOD: Burn in adequate incinerator or bury in approved landfill in accordance with all applicable federal, state, and local regulations.

6. HEALTH HAZARD DATA:

EYE: May cause slight transient (temporary) eye irritation. Corneal injury is unlikely.

SKIN CONTACT: Has caused allergic skin reactions in humans. Prolonged exposure not likely to cause significant skin irritation.

SKIN ABSORPTION: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. The dermal LD50 has not been determined.

INGESTION: Single dose oral toxicity is low. The oral LD50 for rats is >2000 mg/kg. Small amounts incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract.

CANCER INFORMATION: Several studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBA)-based epoxy resins. In one of these, a DGEBA-based resin (containing high levels of several impurities, including a known animal skin carcinogen) was reported to produce a weak carcinogenic response in the skin of one of two strains of mice tested. Recent studies have suggested slight increases in two systemic tumor types following repeated application of certain DGEBA-containing resins (or pure DGEBA), although the response was not uniform among practically identical resins. Based on these data, and the other studies which have not shown cancer, the cause-effect relationship between DGEBA-treatment and these tumor increases is questionable. Indeed, a recent review of the available data by the International Agency for Research on Cancer (IARC) has concluded that DGEBA is not classifiable as to its carcinogenicity.

TERATOLOGY (BIRTH DEFECTS): DGEBA did not cause birth defects or other adverse effects on the fetus when pregnant rabbits were exposed by skin contact, the most likely route of exposure, or when pregnant rats or rabbits were exposed orally.

REPRODUCTIVE EFFECTS: DGEBA did not interfere with reproduction in animal studies.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Animal mutagenicity studies were negative. In vitro mutagenicity studies were negative in some cases and positive in others.

7. FIRST AID:

EYES: Flush eyes with plenty of water.

SKIN: Wash off in flowing water or shower.

INGESTION: Induce vomiting if large amounts are ingested. Consult medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

8. HANDLING PRECAUTIONS:

EXPOSURE GUIDELINE(S): None established.

VENTILATION: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: No respiratory protection should be needed. If respiratory irritation is experienced, use an approved air-purifying respirator.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full-body suit will depend on operation.

EYE PROTECTION: Use safety glasses. Where contact with this material is likely, chemical goggles are recommended because eye contact may cause discomfort even though it is unlikely to cause injury.

9. ADDITIONAL INFORMATION

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: See Dow bulletin entitled "Storage, Handling, and Toxicity of Dow Epoxy Resins". Practice good caution and personal cleanliness to avoid skin and eye contact. Avoid breathing vapors of heated material.

MSDS STATUS: Revised sections 6,7,8 and Regulatory Information.

REGULATORY INFORMATION: (Not meant to be all-inclusive--selected regulations represented.)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state, or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state, or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

U.S. REGULATIONS

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.

MATERIAL SAFETY DATA SHEET
LIQUID MARBLE RESIN

01/15/04

An immediate health hazard

This product is categorized as "an immediate health hazard due to the potential for allergic skin reaction."