

Material Safety Data Sheet

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Section I – PRODUCT IDENTIFICATION

Product Name: LIQUIFUSION™ POLYMER COATING
Product Class: EPOXY RESIN HARDENER
Product Type: MODIFIED ALIPHATIC POLYAMINE
D.O.T. Category: CORROSIVE LIQUID N.O.S
UN 1760 CHEMICAL NOIBN

EMERGENCY TELEPHONE NUMBER: 800-424-9300

Section II – HAZARDOUS INGREDIENTS

Chemical Name	CAS #	%
1. Aminoethylpiperazine (AEP)	140-31-8	The percentages of each of these ingredients are proprietary information. Significant amounts of each however, are present in this material.
2. Nonyl Phenol	25154-52-3	

Section III – PHYSICAL DATA

PHYSICAL STATE:

Moderate Viscosity; pale liquid

SPECIFIC GRAVITY:

0.97 at 77°F

DENSITY:

8.1 lbs/gal at 77°F

Section IV – REACTIVITY DATA

STABILITY: (CONDITIONS TO AVOID) Excessive heating over long periods of time degrades the resin. Freezing may cause a temporary haze to develop. Fire conditions increase viscosity and EEW.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Base acid, amines and oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Under conditions of imperfect combustion and/or prolysis various phenolic compounds, **CO, AND/OR CO²** may be evolved.

HAZARDOUS POLYMERIZATION: Will not occur by itself, but mass of more than one pound of product plus and aliphatic amine will cause irreversible polymerization with considerable heat build-up.

Section V – 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.

Section VI – HEALTH HAZARD DATA AND FIRST AID MEASURES

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.

FIRST AID PROCEDURES

EYES: Flush eyes with water for at least 15 minutes.

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 physician in response to reactions of patient.

Section VII – HANDLING PRECAUTIONS AND STORAGE

EXPOSURE GUIDELINE (S): None established.

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

RESPIRATORY PROTECTION: Adequate ventilation is required. Use NIOSH/MSHA approved respirator device. In confined areas use NIOSH/MSHA approved air purifying respirator or hood. See your safety equipment supplier for evaluation and recommendation.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use protective clothing impervious to this material. Selection of specific items such as gloves, close-toed shoes, 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.

STORAGE AND HANDLING

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: See Dow bulletin entitled “Storage, Handling and Toxicity of Down Epoxy Resins”. Store in cool, dry and dark area. Keep container tightly closed when not in use. Avoid contact with skin and eyes. Practice good caution and personal cleanliness. Wash hands before eating, drinking, chewing gum or using bathroom facilities. 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. Glowing Panels Studio and Arts & Media, Inc. assumes no legal responsibility for use or reliance upon this data.

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.

An immediate health hazard

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