

SAFETY DATA SHEET



Date Prepared : 04/08/2014
SDS No : 125367
Date Revised : 11/10/2016
Revision No : 2

U305 LV

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: U305 LV
GENERAL USE: Liquid amine mixture for the curing of epoxy resins
PRODUCT CODE: 125367

MANUFACTURER

Fiberglass Coatings Inc.
4301A 34th Street North
St. Petersburg, FL 33714
Customer Service: (800) 272-7890
E-Mail: www.fgci.com
Emergency Contact: Chem-Tel
Emergency Phone: (800) 255-3924

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1
Eye Corrosion, Category 1
Respiratory Tract Irritation, Category 1
Aspiration Hazard, Category 1
Skin Sensitization, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 1
Chronic Hazards to the Aquatic Environment, Category 3

GHS LABEL



Corrosion

Health
hazard

Environment

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H314: Causes severe skin burns and eye damage.
H305: May be harmful if swallowed and enters airways.
H335: May cause respiratory irritation.

H317: May cause an allergic skin reaction.
 H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S)

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapors/spray.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P264: Wash skin thoroughly after handling.
 P273: Avoid release to the environment.

Response:

P310: Immediately call a POISON CENTER/doctor.
 P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 P303+P361+P353: If on skin or hair: Immediately take off all contaminated clothing. Rinse skin with water [or shower].
 P304+P340: If inhaled; Remove person to fresh air and keep comfortable for breathing.
 P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P363: Wash contaminated clothing before reuse.
 P391: Collect spillage.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to an approved waste disposal facility.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear, Colorless Liquid.

IMMEDIATE CONCERNS: Causes eye and skin damage. Causes respiratory tract irritation. May be harmful if swallowed. May cause target organ damage based on animal data.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive, contact causes severe eye burns.

SKIN: Corrosive, causes skin burning.

INGESTION: Harmful if swallowed. May cause burns to mouth and esophagus.

INHALATION: Inhalation may cause respiratory tract irritation. Aspiration can cause significant lung damage.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing respiratory and skin disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

TARGET ORGAN STATEMENT: Contains material which causes damage to the following organs: kidneys, lungs, liver, central nervous system (CNS).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polyoxypropylenediamine	> 40	9046-10-0
Nonylphenol	36 - 42	84852-15-3
Diethylenetriamine (DETA)	8 - 12	111-40-0
4,4'-isopropylidenediphenol	5 - 10	80-05-7
Proprietary Amine	< 5	XXXXXX

COMMENTS:**4. FIRST AID MEASURES**

EYES: Flush eyes for at least 15 minutes, holding eyelids open. Do not use eye ointment. If easily accomplished, check for and remove contact lenses. If contact lenses cannot be removed, seek immediate medical attention.

SKIN: Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

INGESTION: Aspiration hazard. If swallowed, Do not induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

INHALATION: If inhaled, remove to fresh air and keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediate medical attention required.

NOTES TO PHYSICIAN: Treat symptomatically. May require supportive therapy as needed. Severe exposure should be followed by at least 48 hour monitoring.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Not categorized as Flammable by GHS standards. However, can still be ignited by external sources above flash point.

EXTINGUISHING MEDIA: Use dry chemicals, CO₂, water spray/fog (not jet), or foam.

HAZARDOUS COMBUSTION PRODUCTS: Produces carbon oxides (CO, CO₂) and irritating or toxic vapors and gases.

FIRE FIGHTING PROCEDURES: Evacuate any non-essential personnel. Extinguish all ignition sources if safe to do so. Move container from fire area if this is possible without hazard. Use water to cool exposed containers and structures until fire is out. Avoid spreading burning material with water jet stream used for cooling purposes. However, burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Fight fire from protected location or safe distance. Contain fire water run-off if possible to prevent environmental damage. Review the "Accidental Release Measures" and "Ecological Information" sections of this SDS.

FIRE FIGHTING EQUIPMENT: Full Bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Extinguish all nearby ignition sources. Stop leak if it can be done safely. Prevent from entering waterways and sewers. Absorb with non-combustible material and transfer into appropriate disposal container using non-sparking tools.

LARGE SPILL: Use a shovel to put the material in to an appropriate waste disposal container.

7. HANDLING AND STORAGE

HANDLING: Avoid ignition sources (flame, spark, smoking, etc) in use or handling areas. Use explosion proof electrical equipment. Ground all equipment containing this material. Do not ingest or breathe vapors/fumes. Avoid contact with eyes and

skin. Always wear proper PPE when handling. Provide sufficient ventilation. A NIOSH respirator is required if permissible exposure limits are exceeded.

STORAGE: Store in a cool, dry, well-ventilated area, away from any sources of ignition and incompatible materials. Keep all equipment grounded to avoid static sparking. Keep container closed when not being used.

SPECIAL SENSITIVITY: Avoid storage in direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
Chemical Name	EXPOSURE LIMITS			
	Type		ppm	mg/m ³
Polyoxypropylenediamine	OSHA PEL	TWA	N/E [1]	[1]
	ACGIH TLV	TWA	N/E	
Nonylphenol	OSHA PEL	TWA	N/E [1]	[1]
	ACGIH TLV	TWA	N/E	
Diethylenetriamine (DETA)	ACGIH TLV	TWA	1 Skin	4
4,4'-isopropylidenediphenol	OSHA PEL	TWA	N/E [1]	[1]
Proprietary Amine	OSHA PEL	TWA	N/E [1]	[1]
	ACGIH TLV	TWA	N/E	

Footnotes:
1. N/E = Not Established

ENGINEERING CONTROLS: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below any exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles and/or face shield. Always use proper eye protection around the work area.

SKIN: Wear impermeable gloves. Clothing should limit skin exposure. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product. Maintain eye wash and shower station near work area in case of exposure.

RESPIRATORY: No respiratory protection is usually required under normal conditions of use.

PROTECTIVE CLOTHING: Clothing should be applicable for the job at hand to protect the skin from repeated exposure to the material.

WORK HYGIENIC PRACTICES: Never eat or drink in areas where the chemical is being used. Wash hands after exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.

ODOR: Ammonia like odor.

ODOR THRESHOLD: No data available.

APPEARANCE: Clear liquid

pH: Alkaline

PERCENT VOLATILE: No data available.

FLASH POINT AND METHOD: 154°C (310°F)

FLAMMABLE LIMITS: Not yet determined.

AUTOIGNITION TEMPERATURE: No data available.

VAPOR PRESSURE: < 1 mm Hg @ 20 C.

VAPOR DENSITY: > 1 (Air =1)

BOILING POINT: > 222°C (432°F)

FREEZING POINT: No data available.

MELTING POINT: No data available.

SOLUBILITY IN WATER: Slightly soluble.

EVAPORATION RATE: Not Available.

SPECIFIC GRAVITY: 0.97 (Water = 1)

VISCOSITY: No data available.

(VOC): No data available.

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid contact with incompatible materials and ignition sources or heat.

HAZARDOUS DECOMPOSITION PRODUCTS: May form: carbon dioxide and carbon monoxide, various hydrocarbons.

INCOMPATIBLE MATERIALS: Avoid all unplanned contact with strong reactive chemicals, Acids, Bases, Amines, Peroxides and other Oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Polyoxypropylenediamine	> 2500 mg / kg (Rat)	> 2900 mg / kg	> 0.74 mg/L (8h)
Nonylphenol	> 1400 mg / kg (oral Rat)	> 2000 mg / kg (dermal Rabbit)	
Diethylenetriamine (DETA)	1080 mg / kg (Rat)	1090 mg / kg (Rabbit)	> 0.07 to 0.3 mg/L (4h) Rat
4,4'-isopropylidenediphenol	> 2000 mg / kg (Rat)	3000 mg / kg (Rabbit)	

CARCINOGENICITY

NOTES: Not considered carcinogenic by OSHA, NTP, or IARC.

STOT-SINGLE EXPOSURE: May cause damage to the following organs: kidneys.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Considered very toxic to aquatic organism, may cause long-term adverse effects in the aquatic environment. Not readily biodegradable. Shows high bioaccumulation potential. Water polluting material. May be harmful to the environment if released in large quantities.

BIOACCUMULATION/ACCUMULATION: Bioaccumulation: high potential, not readily biodegradable
Bioconcentration factor (BCF): 740, LogPow: 5.4

AQUATIC TOXICITY (ACUTE):

Exposure :: Species :: Result

3H Static :: Bacteria :: 950 mg/L (EC50)

96 Flow-Thru :: Daphnia :: 0.596 mg/L (EC50)

48H :: Daphnia :: 0.14 mg/L (EC50)

48H Static :: Daphnia :: 0.085 mg/L (EC50)

96H Flow-Thru :: Daphnia :: 0.0207 mg/L (EC50)

72H Static :: Algae :: 1.3 mg/L (EC50)

96H Static :: Algae :: 0.41 mg/L (EC50)

Notes: Values listed for Nonylphenol (CAS# 84852-15-3)

GENERAL COMMENTS: No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: UN 2735, Amines, Liquid, Corrosive, n.o.s. (Polyoxypropylenediamine, Nonylphenol), Class 8, PG III, "Marine Pollutant"

MARINE POLLUTANT #1: Causes skin irritation.

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Amines, Liquid, Corrosive, n.o.s. (Polyetheramine, Nonylphenol)

UN NUMBER: 2735

HAZARD CLASS: 8

PACKING GROUP: III

AIR (ICAO/IATA)

SHIPPING NAME: Amines, Liquid, Corrosive, n.o.s. (Polyetheramine, Nonylphenol)

TECHNICAL NAME: Nonylphenol

UN/NA NUMBER: 2735

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

VESSEL (IMO/IMDG)

SHIPPING NAME: UN 2735, Amines, Liquid, Corrosive, n.o.s. (Polyoxypropylenediamine, Nonylphenol), Class 8, PG III, "Marine Pollutant"

TECHNICAL NAME: Nonylphenol

UN/NA NUMBER: 2735

PACKING GROUP: III

MARINE POLLUTANT #1: Nonylphenol

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate (acute) Health Hazard, Chronic (Delayed) Health Hazard.

FIRE: No test data available. **PRESSURE GENERATING:** No test data available. **REACTIVITY:** No test data available.
ACUTE: Yes **CHRONIC:** Yes

TITLE III NOTES: Components meeting the requirements are listed.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: Differential Scanning Calorimetry(DSC) Decomposition.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Differential Scanning Calorimetry(DSC) Decomposition.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All items are TSCA listed.

CALIFORNIA PROPOSITION 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

OSHA HAZARD COMM. RULE: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): Causes skin irritation.

WHMIS CLASS: Class D-2B: Material causing other toxic effects (Toxic).
Class E: Corrosive material

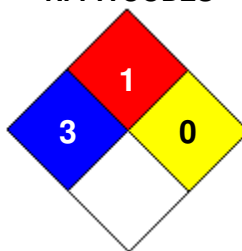
16. OTHER INFORMATION

PREPARED BY: BC **Date Revised:** 11/10/2016

REVISION SUMMARY: This MSDS replaces the 02/13/2015 MSDS. Revised: **Section 3:** Wt.%. **Section 14:** AIR (ICAO/IATA) (UN/NA NUMBER), DOT (DEPARTMENT OF TRANSPORTATION) (TECHNICAL NAME, PRIMARY HAZARD CLASS/DIVISION, UN/NA NUMBER, PACKING GROUP), ROAD AND RAIL (ADR/RID) (UN NUMBER), VESSEL (IMO/IMDG) (MARINE POLLUTANT #1, PRIMARY HAZARD CLASS/DIVISION, UN/NA NUMBER).

HMIS RATING

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		

NFPA CODES

HMIS RATINGS NOTES: The customer is responsible for determining the PPE code for this material.

MANUFACTURER DISCLAIMER: This information is compiled from sources believed reliable as of the date of issue, it is provided in good faith and correct to the best of our knowledge. No warranty, guarantee, or representation is made as to the sufficiency of the information for the safe use of the product nor to relieve the end user of their own Federal, State, and local regulatory compliance requirements.