

SAFETY DATA SHEET



Date Issued : 3/20/2014
SDS No : 126718
Date Revised : 7/24/2015
Revision No : 3

Liquid Foam, A-Side

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Liquid Foam, A-Side
GENERAL USE: Isocyanate side of 2 part Polyurethane foam products.
PRODUCT CODE: 126718
CHEMICAL FAMILY: Aromatic Isocyanates

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:

Acute Toxicity (Inhalation), Category 4
Eye Irritation, Category 2
Skin Irritation, Category 2
Respiratory Sensitization, Category 1
Target Organ Toxicity (Repeated exposure), Category 2
Carcinogenicity, Category 2
Skin Sensitization, Category 1
Target Organ Toxicity (Single exposure), Category 3

GHS LABEL



Exclamation
mark



Health
hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H332: Harmful if inhaled.
H319: Causes serious eye irritation.
H315: Causes skin irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H373: May cause damage to organs through prolonged or repeated exposure.
H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

H351: Suspected of causing cancer.

PRECAUTIONARY STATEMENT(S)

Prevention:

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe fumes.

P284: Wear respiratory protection.

P280: Wear protective gloves, protective clothing, eye protection and face protection.

P264: Wash skin thoroughly after handling.

Response:

P312: Call a POISON CENTER or physician if you feel unwell.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P332+P313: If skin irritation occurs: Get medical attention.

P362: Take off contaminated clothing and wash before reuse.

P321: Specific treatment (see Section 4: First Aid).

Disposal:

P501: Dispose of container and its contents in accordance with all Federal, State, and local regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Liquid, Brown, faint aromatic odor.

IMMEDIATE CONCERNS: CONTAINS DIPHENYLMETHANE DIISOCYANATE (MDI) CAS No. 101-68-8.

INHALATION OF MDI MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSITIZATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPIRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. AVOID CONTACT WITH SKIN AND EYES. SKIN OR EYE CONTACT MAY CAUSE IRRITATION. SKIN CONTACT WITH MDI MAY CAUSE RESPIRATORY SENSITIZATION.

POTENTIAL HEALTH EFFECTS

EYES: Causes eye irritation.

SKIN: Irritating to the skin.

INGESTION: Harmful if swallowed. May cause nausea and vomiting.

INHALATION: Inhalation can cause dizziness, drowsiness, headache, nausea, and irritation of nose, throat and respiratory tract. Can also cause respiratory sensitization.

CARCINOGENICITY: This mixture is not listed as a carcinogen, however, some of the components may be suspected to cause cancer in humans.

MEDICAL CONDITIONS AGGRAVATED: The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Contact may aggravate pulmonary disorders.

ROUTES OF ENTRY: Inhalation, ingestion, skin and eye contact.

TARGET ORGAN STATEMENT: Skin, Lungs.

IRRITANCY: Irritating to eyes, respiratory system and skin.

SENSITIZATION: The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Diphenylmethane diisocyanate (MDI 4,4')	37	101-68-8
Diphenylmethane diisocyanate (MDI 2,4)	< 10	26447-40-5
Higher polymers of similar structure	< 55	9016-87-9

COMMENTS: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Immediately flush eye with large amounts of water for at least 15 minutes while holding eyelids open. Transport to the nearest medical facility for further treatment.

SKIN: Remove contaminated clothing. Flush with large amounts for at least 15 minutes followed by washing with soap if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.

INGESTION: Give large amounts of water. Do not induce vomiting, seek immediate medical attention.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

NOTES TO PHYSICIAN: Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

ANTIDOTES: Specific antidotes or neutralizers to isocyanates do not exist.

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 chemical, CO₂, water spray/fog (not jet), or foam

FIRE FIGHTING PROCEDURES: Fire Fighters should wear appropriate protective equipment and self contained apparatus (SCBA) with full face piece operated in positive pressure mode. Cool any adjacent drums to prevent vapor build up.

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).

FIRE EXPLOSION: At temperatures above 400°F, MDI can polymerize/decompose causing pressure build-up in closed containers and possibly rupture. Avoid water contamination in closed containers which may cause rupture (CO₂ is evolved).

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon and nitrous gases, fumes/smoke, isocyanate, vapor.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

LARGE SPILL: If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available

from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal. For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not allow spill to enter drains, sewers or waterways.

GENERAL PROCEDURES: Contain spill. Absorb with sawdust, etc., and shovel into open top drum. Decontaminate absorbent and spill area with 2% detergent/water solution. Let waste stand for 1 to 2 days, then dispose of waste in a licensed facility. Respiratory protection/ventilation is recommended during clean-up.

COMMENTS: Spill area can be decontaminated with the following recommended decontamination solution:

Decontamination Solution #1: 8-10% sodium carbonate and 2% liquid soap in water

Decontamination Solution #2: Liquid/yellow soap (potassium soap with ~15% anionic dense): 20 mL ; Water: 700 mL; Polyethylenglycol (PEG 400): 350 mL

7. HANDLING AND STORAGE

HANDLING: Provide sufficient air exchange and/or exhaust in work rooms. Occupational exposure limits should not be exceeded (section 8). Avoid inhalation of vapors and contact with skin or eyes. Keep away from food, drink and tobacco. Wash hands after handling.

STORAGE: Store in a cool, dry, well-ventilated area, away from incompatible materials. Keep container closed when not being used.

STORAGE TEMPERATURE: (32°F) Minimum to (110°F) Maximum

Notes: Protect against moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
			EXPOSURE LIMITS	
			OSHA PEL	
Chemical Name			ppm	mg/m ³
Diphenylmethane diisocyanate (MDI 4,4')	TWA		0.02 ^[1]	0.2 ^[1]
Higher polymers of similar structure	TWA		0.02	0.2
Footnotes:				
1. CLV (ceiling limit value)				

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: Chemical resistant protective gloves should be worn to prevent all skin contact. Suitable materials may include, chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, depending upon conditions of use.

RESPIRATORY: When atmospheric levels may exceed the occupational exposure limit (PEL or TLV), NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place. For emergency or non-routine, high exposure situations, including

confined space entry, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

PROTECTIVE CLOTHING: Chemical resistant protective suit, butyl rubber gloves, chemical resistant safety boots.

WORK HYGIENIC PRACTICES: Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible. Observe the appropriate PEL or TLV value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Earthy odor.

ODOR THRESHOLD: No data available.

COLOR: Dark Amber

PHYSICAL STATE COMMENTS: Liquid.

pH: No data available.

PERCENT VOLATILE: No data available.

FLASH POINT AND METHOD: 200°C (390°F)

FLAMMABLE LIMITS: No data available.

AUTOIGNITION TEMPERATURE: No data available.

VAPOR PRESSURE: 0.00016 mmHg

VAPOR DENSITY: No data available.

BOILING POINT: 329°C (625°F)

MELTING POINT: No data available.

POUR POINT: No data available.

SOLUBILITY IN WATER: Insoluble, reacts with water

EVAPORATION RATE: No data available.

DENSITY: No data available.

SPECIFIC GRAVITY: 1.16 (Water = 1)

VISCOSITY: No data available.

(VOC): No data available.

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: Yes

STABILITY: Stable under recommended storage conditions.

POLYMERIZATION: Will only occur after contact with strong Acids, Bases, Alcohols and Amines

CONDITIONS TO AVOID: Temperatures over 400F, and contact with Incompatible substances

POSSIBILITY OF HAZARDOUS REACTIONS: Reacts with water, with formation of carbon dioxide. Risk of bursting. Reacts with alcohols. Reacts with acids. Reacts with alkalies. Reacts with amines. Risk of exothermic reaction. Risk of polymerization. Contact with certain rubbers and plastics can cause brittleness of the substance/product with subsequent loss in strength.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products: carbon monoxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors.

INCOMPATIBLE MATERIALS: Water, alcohols, strong bases, Substances/products that react with isocyanates.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Diphenylmethane diisocyanate (MDI 4,4')	> 2000 mg / kg (Rat)	> 9400 mg / kg (dermal Rabbit)	2.24 mg/L (aerosol)

EYE EFFECTS: Eye irritant

SKIN EFFECTS: Skin Irritant, Sensitizer.

CHRONIC: Chronic toxicity observed in rats: 2 years, inhalation; NOAEL: 0.2mg/m³, (rat, Male/Female, 6hrs/day, 5 days/week)

CARCINOGENICITY

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

SENSITIZATION: Skin sensitization possible following short or long term exposure.

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: The product is unstable in water. Poorly biodegradable. Bioconcentration factor 200 (28 days, Carp).

AQUATIC TOXICITY (ACUTE): Information for: Diphenylmethane-4,4'-diisocyanate (MDI).

96-HOUR LC₅₀: > 1000 mg/L (Brachydanio rerio)

48-HOUR EC₅₀: > 1000 mg/L (Daphnia Magna)

96-HOUR EC₅₀: 1640 mg/L (Green Algae)

Notes: The product may hydrolyse. The test result maybe partially due to degradation products. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be in accordance with all Federal, State, and local regulations. Empty containers may still be considered dangerous due to residual vapors/liquid/dust.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated by DOT

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 5000 Pounds

OTHER SHIPPING INFORMATION: Not classified as a dangerous good under transport regulations. This product is regulated if the amount in a single receptacle exceeds the Reportable Quantity (RQ).

ROAD AND RAIL (ADR/RID)

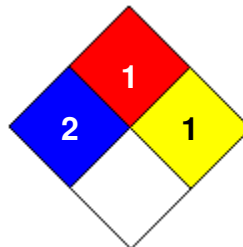
PROPER SHIPPING NAME: Not Regulated

AIR (ICAO/IATA)**SHIPPING NAME:** Not Regulated**VESSEL (IMO/IMDG)****SHIPPING NAME:** Not Regulated**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 **PRESSURE GENERATING:** Yes **REACTIVITY:** Yes **ACUTE:** Yes **CHRONIC:** Yes**313 REPORTABLE INGREDIENTS:** Diphenylmethane-4,4'-diisocyanate (MDI) CAS# 101-68-8.

Polymeric Diphenylmethane diisocyanate (P-MDI) CAS# 9016-87-9.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**CERCLA RQ:** 5000 pounds**REPORTABLE SPILL QUANTITY:** 13,157 lbs**TSCA (TOXIC SUBSTANCE CONTROL ACT)****TSCA REGULATORY:** Listed.**OSHA HAZARD COMM. RULE:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200**16. OTHER INFORMATION****PREPARED BY:** BC**REVISION SUMMARY:** This MSDS replaces the 6/26/2015 MSDS. Revised: **Section 7:** HANDLING. **Section 9:** COLOR, ODOR, VAPOR PRESSURE. **Section 11:** CHRONIC, SENSITIZATION.**HMIS RATING**

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		1
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.