

SAFETY DATA SHEET

MEMBRANE 310 COMPONENT B

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MEMBRANE 310 COMPONENT B

PRODUCT CODE: #MEM310B

PRODUCT USE: Hardener for 2 component epoxy coatings

MANUFACTURER

DUDICK, INC.
1818 MILLER PARKWAY
STREETSBORO, OH, 44241
330-562-1970

24 HR. EMERGENCY TELEPHONE NUMBER

CHEM-TEL (US Transportation): (800)255-3924

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2. HAZARDS IDENTIFICATION

CLASSIFICATION:

Carcinogenicity - Category 2

Acute Toxicity - Dermal - Category 4

Toxic to Reproduction - Category 2

Skin Corrosive - Category 1

Skin Sensitizer - Category 1

Serious Eye Damage/Eye Irritation - Category 1

Flammable liquids - Category 3

Specific target organ toxicity - multiple exposures - Respiratory tract irritation - Category 3

Respiratory Sensitizer - Category 1

GHS LABEL ELEMENTS:



SIGNAL WORD: Danger

HAZARD STATEMENTS:

H320 Causes eye irritation.

H226 Flammable liquid and vapor

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H351 Suspected of causing cancer .

H361 Suspected of damaging fertility for the unborn child .

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H373 Causes damage to organs through prolonged or repeated exposure
H412 Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS :

- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/mixing/ equipment.
- P370+P378 In case of fire: Use foam, dry chemical, or carbon dioxide for extinction.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P202 Do not handle until all safety precautions have been read and understood.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P363 Wash contaminated clothing before reuse.
- P501 Dispose of contents/container in accordance with local, regional, and federal regulations.
- P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
- P233 Keep container tightly closed.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash all contacted body parts thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	Weight %	CAS Number
Polyamide polymer	15% to 30%	PROPRIETARY
Isophoronediamine	15% to 25%	2855-13-2
Xylene - Mixed isomers	15% to 30%	1330-20-7
1-(2-aminoethyl)piperazine	5% to 10%	140-31-8
Benzyl alcohol	5% to 10%	100-51-6
4-tert-Butylphenol	5% to 10%	98-54-4
2,4,6-Tris(dimethylaminomethyl)phenol	0% to 5%	90-72-2

If CAS number is "proprietary", the specific chemical identity has been withheld by the manufacturer as a trade secret.

4. FIRST AID MEASURES

EYES: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

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SKIN: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

INGESTION: Rinse mouth out with water.

Consult physician.

Do not induce vomiting. Do not give liquids.

INHALATION: If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc.).

If breathing is difficult, oxygen should be administered by qualified personnel.

Consult a physician after significant exposure. Move person to fresh air. If unconscious place in recovery position and seek medical advice.

NOTES TO PHYSICIAN: NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Alcohol resistant foam; Carbon Dioxide (CO₂); dry chemical; dry sand; use water to keep containers cool.

UNSUITABLE EXTINGUISHING MEDIA: Do not use high pressure water jet as this may spread the area of the fire.

SPECIFIC HAZARDS IN CASE OF FIRE: Closed containers may rupture (due to build up in pressure) when exposed to extreme heat.

Releases flammable vapors below normal ambient temperatures. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Flammable vapors may be heavier than air and travel long distances along the ground before igniting and flashing back to vapor source. Move containers from fire area if it can be done without risk. Cool containers with flooding quantities of water until well after fire is out. Burning may produce noxious and toxic fumes. Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gasses. Downwind personnel should be evacuated.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTION FOR FIRE FIGHTERS: Wear self-contained breathing apparatus (SCBA) in positive pressure mode and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Isolate area; ensure adequate ventilation; remove all sources of ignition; use appropriate personal protection equipment; avoid breathing mist, vapors, spray; avoid contact with skin, eyes and clothing; keep unnecessary and unprotected personnel from entering the involved area.

ENVIRONMENTAL PRECAUTIONS: Halt the flow of material as soon as practical using appropriate barriers; Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches, waterways by using sand, earth or appropriate barriers.

METHOD AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Eliminate all sources of ignition. All equipment used when handling this product must be grounded. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Dike large spills and place materials in salvage containers. Water spray may reduce vapor; but may not prevent ignition in closed spaces.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Use only in well-ventilated areas. Avoid contact with skin and eyes. Avoid breathing vapors and/or aerosols. Emergency showers and eye wash stations should be readily accessible. Use personal protective equipment. When using, do not eat, drink or smoke.

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Use only non-sparking tools. Extinguish all ignition sources. Containers must be properly grounded before beginning transfer. Handle empty containers with care; vapor/residue may be flammable. This material may attack some forms of plastics, rubbers, and coatings. Wear recommended personal protective equipment. Observe precautions pertaining to confined space entry. Do not breathe vapors or spray mist.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES: Do not store near incompatibles (strong oxidizers, acids, alkalis). Do not store near excessive heat or near sources of ignition. Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS\PERSONAL PROTECTION

EXPOSURE LIMITS

Components	CAS	Limits
Polyamide polymer	PROPRIETARY	None established
Isophoronediamine	2855-13-2	None established.
Xylene - Mixed isomers	1330-20-7	OSHA TWA - 100 ppm OSHA STEL - 150 ppm
1-(2-aminoethyl)piperazine	140-31-8	None established.
Benzyl alcohol	100-51-6	WEEL 10 ppm
4-tert-Butylphenol	98-54-4	None established.
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	None established.

ENGINEERING CONTROLS: Ventilation:

Use local exhaust ventilation, or other engineering controls to maintain airborne levels requirements or guidelines.

General ventilation may not be sufficient.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: If ventilation is inadequate or if irritation or other symptoms are experienced, wear a NIOSH/MHSA approved respirator with organic vapor cartridge.

EYES PROTECTION: Splash-proof chemical goggles.

SKIN PROTECTION: Impervious clothing. Rubber or plastic boots.

Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection: Use chemical resistant gloves. Consult glove manufacturer for recommendations.

WORK HYGIENIC PRACTICES: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating. Wash contaminated clothing before reuse. Eye wash stations and emergency showers should be available.

OTHER USE PRECAUTIONS: The type and degree of personal protective equipment will depend on the specific work operation. Eye wash stations and emergency showers should be available. Inspect and replace personal protective equipment at regular intervals; use professional care in their selection, use and care.

COMMENTS: None.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Viscous liquid

COLOR: Pale amber

FLASH POINT AND METHOD: 27 C CC

AUTO-IGNITION TEMPERATURE: Not Determined.

BOILING POINT/RANGE: 138C

MELTING POINT: Not Determined.

VAPOUR PRESSURE: Not determined.

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VAPOUR DENSITY: Heavier than air.
SOLUBILITY: Not determined.
ODOR/THRESHOLD: Amine-like.
LOWER / UPPER FLAMMABLE LIMITS: 1.1 TO 6.6
DENSITY: 0.9811
EVAPORATION RATE: Slower than ether.
PARTITION COEFFICIENT: Not determined.
pH: Not Applicable.
DECOMPOSITION TEMPERATURE: Not determined.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: This product is stable under normal storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS: Mixtures with strongly acidic materials may produce an exothermic reaction.
CONDITIONS TO AVOID: Avoid elevated temperatures and sources of ignition.
MATERIALS TO AVOID: Sodium hypochlorite. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids.
Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
Reactive metals (e.g. sodium, calcium, zinc etc.).
Materials reactive with hydroxyl compounds.
Oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS: Nitric acid. Ammonia Nitrogen oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid.
Carbon monoxide. Carbon dioxide (CO₂).
Aldehydes. Flammable hydrocarbon fragments.
Organic acid vapors.

11. TOXICOLOGICAL INFORMATION

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE EFFECTS:

EYE CONTACT: Causes eye burns. May cause blindness. Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. Exposed individuals may see rings around bright lights. This effect is temporary and has no known residual effect. Product vapor can cause glaucoma (corneal edema) when absorbed into the tissue of the eye from the atmosphere.

SKIN CONTACT: Causes skin burns.

INHALATION: Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Inhalation of aerosol may cause irritation to the upper respiratory tract. May cause nose, throat, and lung irritation. Can cause severe eye, skin and respiratory tract burns.

INGESTION: Harmful if swallowed. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

TARGET ORGAN: No data available for this product.

CHRONIC EFFECTS: A component is suspected of causing cancer. Risk of cancer depends on duration of exposure.

TOXICITY VALUES: Not determined

12. ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY:

Not determined.

BIO-ACCUMULATIVE POTENTIAL:

Not determined.

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MOBILITY IN SOIL:

Not determined.

OTHER ADVERSE EFFECTS:

Not known.

ECOTOXICOLOGICAL OTHER INFORMATION:

No data available for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of according to local, state, and federal regulations through a licensed disposal facility.

14. TRANSPORT INFORMATION

UN NUMBER: UN2924

UN PROPER SHIPPING NAME: Flammable liquid, corrosive, n.o.s. (Xylene, Isophoronediamine)

TRANSPORT HAZARD CLASS:

3

TRANSPORT HAZARD SUBCLASS:

8

PACKING GROUP: III

MARINE POLLUTANT Y/N:

DOT - Yes

IATA - Yes

IMDG - Yes

SPECIAL PRE-CAUTIONS: No data available for this product.

15. REGULATORY INFORMATION

U.S. REGULATIONS:

All components of this product are listed on or exempt from the TSCA Inventory.

U.S. SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: Yes

PRESSURE GENERATING: No

REACTIVITY: No

ACUTE: Yes

CHRONIC: Yes

313 REPORTABLE INGREDIENTS:

313 REPORTABLE INGREDIENTS

Chemical Name	Weight %	CAS
Xylene - Mixed isomers	15% to 20%	1330-20-7

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No data available for this product.

STATE REGULATIONS:

No data available for this product.

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Chemical Name	CAS
Xylene - Mixed isomers	1330-20-7
1-(2-aminoethyl)piperazine	140-31-8

No data available for this product.

Chemical Name	CAS
Isophoronediamine	2855-13-2
Xylene - Mixed isomers	1330-20-7
1-(2-aminoethyl)piperazine	140-31-8
4-tert-Butylphenol	98-54-4
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2

No data available for this product.

Chemical Name	CAS
Isophoronediamine	2855-13-2
Xylene - Mixed isomers	1330-20-7
1-(2-aminoethyl)piperazine	140-31-8
4-tert-Butylphenol	98-54-4
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2

OTHER GOVT. REGULATIONS: No other information available

16. OTHER INFORMATION

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