SAFETY DATA SHEET

Date issued : 02/20/2023
SDS number : MM Pour Foam (Isocyanate) A-side

MM Pour Foam (Isocyanate) A-side

1. Identification

Product code: 157005A, 157010A
Product identifier: MM Pour Foam (Isocyanate) A-side
Relevant identified uses: Component for the manufacture of polyurethane foam

Manufacturer / Supplier

Merritt Marine Supply
2621 NE 4 th Ave.
Pompano Beach, Florida 33604
Emergency contact: Chemtrec
Emergency Phone: (800) 424-9300
Customer Service: (954) 946-5350
E-Mail: Sales@MerrittSupply.com
Web: MerrittSupply.com
Emergency contact: International
Emergency Phone: (703) 527-3887

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Acute Toxicity (Inhalation), Category 4
Eye Irritation, Category 2
Skin Irritation/Corrosion, 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) CNS, Category 3
Target Organ Toxicity (Single exposure) CNS, Category 3

Label elements


Exclamation mark


Health hazard

Signal word: DANGER

Hazard statement(s)

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335: May cause respiratory irritation.
H351: Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H373: May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Precautionary statement(s)

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash ... thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P284: [In case of inadequate ventilation] wear respiratory protection.

Response:

P312: Call a POISON CENTER/doctor/...if you feel unwell.
P304+P340: IF INHALED: Remove person to fresh air and keep 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/attention.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P362: Take off contaminated clothing.
P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.

Disposal:

P501: Dispose of contents/container to a RCRA approved Treatment Storage Disposal Facility.

Hazards not otherwise classified: Product reacts with water including the moisture contained within skin cells and other bodily tissues.

Emergency overview

Physical appearance: Viscous liquid.

Immediate concerns: Can cause eye, skin, respiratory tract irritation. May be harmful if swallowed.

Comments health: Product contains MDI CAS 101-68-8, Diphenylmethane-4,4-diisocyanate

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Diphenylmethane-4,4'-diisocyanate (MDI)	38	101-68-8
MDI Mixed Isomers	< 10	26447-40-5
P-MDI	< 55	9016-87-9

4. First-aid measures

Eye: 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 and keep person calm. If not breathing give artificial respiration. If breathing is difficult trained personnel can administer oxygen. Immediate medical attention required.

Indication of immediate medical attention and special treatment needed, if necessary: Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

5. Fire-fighting measures

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

Suitable extinguishing media: Use dry chemicals, CO2, water spray/fog (not jet), or alcohol resistant foam.

Other considerations: At Temperatures over 400 F, MDI can polymerize / decompose causing pressure build up in closed containers.
Avoid water contamination to closed containers which may rupture due to the evolution of CO2 from the MDI /water reaction

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.

Hazardous decomposition products: Burning releases CO,CO2, oxides of nitrogen, isocyanate vapors and traces of hydrogen cyanide.

6. Accidental release measures

Small spill: Absorb Isocyanate spills with rags or other suitable absorbent material and place that material into open container for disposal.
Do not make container pressure tight. Move container to a well-ventilated area (outside).

Large spill: For large liquid spills, transfer by mechanical means such as shovels to a salvage tank or drums for recovery or disposal. Do not flush away residues with water.
Remove remaining materials with wet absorbents and retain as contaminated waste.
Additionally do not place waste into an airtight sealed container as it will probably generate pressure and rupture the container..

Environmental precautions

Water spill: Prevent from entering into ditches, drains, sewers, waterways, and/or groundwater.

Comments: Spill area can be decontaminated with the following recommended decontamination solution.
Solution: 8-10% sodium carbonate and 2% liquid soap in water

7. Handling and storage

General procedures: Put on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Precautions for safe 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.

Conditions for safe storage: Store in a cool, dry, well-ventilated area. 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 controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
Diphenylmethane-4,4'-diisocyanate (MDI)			.005	.051
P-MDI	**OSHA PEL**		.005	.051

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

Individual protection measures, such as personal protective equipment

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

Skin protection - hand protection: 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 protection: 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.

Skin protection - other: Chemical resistant protective suit, butyl rubber gloves, chemical resistant safety boots.

Occupational hygiene 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

Color: Dark Amber

Odor: Sharp Aromatic Odor

Physical state comments: Liquid.

pH: No data available.

Melting point: No data available.

Freezing point: Not Applicable.

Initial boiling point and boiling range: > 300°C (572°F)

Flash point: > 250°C (482°F)

Evaporation rate (n-butyl acetate = 1): No data available.

Explosion limit / flammability limit notes: Not Applicable

Vapor pressure: 0.00016 mmHg

Relative vapor density: No data available.

Density: 10.3 #/Gal.

Relative density: 1.24

Solubility: Insoluble, reacts with water

Auto-ignition temperature: Not Applicable.

Percent volatiles: No data available.

VOC content: 0 %

10. Stability and reactivity

Reactivity: Yes

Dangerous polymerization: Will only occur after contact with strong Acids, Bases, Alcohols, Amines and chemcals with hydroxyl groups.

Chemical stability: Polymerises at about 200 C with evolution of CO2.

Conditions to avoid: Avoid moisture.

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 acids, bases, and substances/products that react with isocyanates.

11. Toxicological information

Acute toxicity

Acute inhalation toxicity LC_{50}: ~ 490 mg/Kg, vapor, 4 hr. (rat)

Notes: Symptoms of overexposure are diszziness, headache, tiredness, nausea, unconsciousnes, cessation of breathing.

Respiratory or skin sensitization: Skin sensitization possible following short or long term exposure.

Carcinogenicity

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

General comments: Chronic Toxicity ; 2 year inhalation NOAEL ; .2 mg /m3 (rat M/F, 6hr /day/5 day/week)

Comments: Information per orignal manufacturer's SDS

12. Ecological information

Ecotoxicological information: Persistance and degradability : 0%

Aquatic toxicity, both acute and chronic: Information for: Diphenylmethane-4,4'-diisocyanate (MDI).

96-hour LC_{50}: > 1000 mg/l Zebra fish

96-hour EC_{50}: > 3000 mg/L Killingfish

Bioaccumulative potential: Does not bioaccumulate.

13. Disposal considerations

Disposal methods: Incinerate or dispose of in a licensed facility. Do not discharge substance/product in to sewer system. Do not burn empty drums or cut open with gas or an electric torch as toxic decomposition products may be liberated. Do not resuse empty containers.

14. Transport information

USA Department of Transport Regulations (DOT)

UN proper shipping name: Not classified as dangerous good.

Technical name: MDI, CAS 101-68-8

Reportable quantity (rq) under CERCLA: 5000 Pounds

DOT 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).

ADR / RID - road / rail

UN proper shipping name: Not classified as dangerous good.

ICAO / IATA - air

UN proper shipping name: Not classified as dangerous good.

IMO / IMDG - International

UN proper shipping name: Not classified as dangerous good.

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health hazards: Causes skin and eye irritation and possible damage.., Immediate (acute) Health Hazard, Chronic (Delayed) Health Hazard., Respiratory Sensitization, Respiratory Tract Irritation, Serious Eye Damage, Skin Irritation

311/312 Physical hazards: None

313 reportable ingredients: Methylene Bis Phenylisocyanate 101-68-8 5000 lbs
Polymeric Diphenylmethane diisocyante 9016-87-9

TSCA (The Toxic Substances Control Act)

TSCA Status: Listed.

Clean air act (hazardous air pollutants): None present or none in regulated quantities

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.

USA OSHA Hazard Communication Standard (29CFR 1910.1200): This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Clean water act: None present or none in regulated quantities

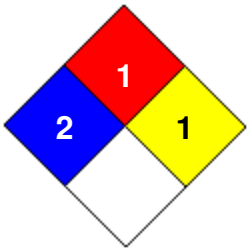
16. Other information

Prepared by: RD **Date Prepared:** 02/20/2023

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 at the date of issue, 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.

SAFETY DATA SHEET

Date issued : 04/24/2025
SDS number : MM Pour Foam (2 # Polyol) B-side

MM Pour Foam (2 # Polyol) B-side

1. Identification

Product code: 157005B, 157010B
Product identifier: MM Pour Foam (2 # Polyol) B-side
Relevant identified uses: Component for the manufacture of polyurethane foam

Manufacturer / Supplier

Merritt Marine Supply
2621 NE 4 th Ave.
Pompano Beach, Florida 33604
Emergency contact: Chemtrec
Emergency Phone: (800) 424-9300
Customer Service: (954) 946-5350
E-Mail: Sales@MerrittSupply.com
Web: MerrittSupply.com
Emergency contact: International
Emergency Phone: (703) 527-3887

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Skin Irritation, Category 3
Eye Irritation, Category 2

Label elements

Exclamation mark

Signal word: WARNING

Hazard statement(s)

H335: May cause respiratory irritation.
H312: Harmful in contact with skin.
H320: Causes eye irritation.

Precautionary statement(s)

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P271: Use only outdoors or in a well-ventilated area.
P264: Wash ... thoroughly after handling.

Response:

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/attention.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501: Dispose of contents/container to a RCRA approved Treatment Storage Disposal Facility.

Carcinogenicity: Not classified as a carcinogen by the International Agency for Research of Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Routes of entry: Inhalation, ingestion, skin and eye contact.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Tertiary Amine Catalyts	< 1	
Trans-1-Chloro-3,3,3-Trifluoropropene	7 - 8	102687-65-0

Comments: The exact percentage (concentration) of composition has been withheld as a trade secret. If CAS number is Proprietary or T/S, the specific chemical identity and percentage of compostion has been withheld as a trade secret. Mixture; Other components below reportable levels.

4. First-aid measures

Eye: Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists seek immediate medical attention.

Skin: Wash with soap and water. Remove and dispose of any contaminated clothing or shoes. Get medical attention if irritation develops or persists.

Ingestion: Induce vomiting; get medical attention.

Inhalation: Move to fresh air if symptoms develop. If breathing is difficult, give oxygen and call physician.

Most important symptoms and effects, both acute and delayed

Inhalation: Inhalation of vapors may cause breathlessness coughing, tremors, or confusion, . May also lead to allergic or cardiac sensitization.

Indication of immediate medical attention and special treatment needed, if necessary: Treat symptomatically.

5. Fire-fighting measures

Flammable class: Not categorized as Flammable by GHS standards.

General hazard: Cool any adjacent drums of product to prevent pressure build up.

Suitable extinguishing media: Use dry chemicals, CO2, water spray/fog (not jet), or alcohol resistant foam.

Other considerations: Do not allow run-off from fire fighting to enter drains or water courses.

Fire fighting procedures: Evacuate the area immediately. Only trained personnel should fight any industrial or chemical fire.

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).

Hazardous decomposition products: During fire, gases hazardous to health may be formed.

6. Accidental release measures

Small spill: Stop the spill if possible. Dike the area with absorbent material. Vermiculite, sawdust or sand may be used to absorb as much of the spill as possible. Shovel spilled material into an overpak drum or open 55-gallon drum.

Large spill: Follow procedure for small spills. Dike ahead of spill to contain material. Follow Federal, State and local regulations for disposal.

Environmental precautions

Water spill: Prevent from entering into ditches, drains, sewers, waterways, and/or groundwater.

General procedures: Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Special protective equipment: Proper safety equipment is essential to any large spill clean up, Safety Glasses, Gloves, Impervious clothing, and Breathing masks as neccessary to maintain Permissible Exposure Limits (PELs) below regulatory guidelines.

7. Handling and storage

General procedures: Always use in well ventilated areas. Wash thoroughly after handling. Use proper personal protective equipment (PPE) for eye and skin exposure. A nearby eye wash station should be avialable. An approved Respirator may be necessary to maintain airborn concentrations below the Exposure limits. Use information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls safe handling, storage and disposal.

Precautions for safe handling: Relieve pressure slowly when opening container. Under no circumstances should empty drums be

burned or cut open with an electric or gas torch.

Conditions for safe storage: Store in a cool, dry, well-ventilated area. Keep container closed when not being used.

Storage temperature: (65°F) Minimum to (85°F) Maximum

Notes: Store out of direct sunlight

8. Exposure controls/personal protection

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
Trans-1-Chloro-3,3,3-Trifluoropropene		**TWA**	300	

Appropriate engineering controls: Provide ventilation or other engineering controls to keep the airborne concentrations of vapors or mists below any applicable workplace exposure limits (PEL/TLV). An installed emergency eye wash station or safety showers should be located near the work area.

Individual protection measures, such as personal protective equipment

Eye / face protection: Chemical splash goggles. Always use proper eye protection around the work area.

Skin protection - hand protection: Avoid skin contact. Use heavy duty gloves made of Viton or heavy nitrile rubber. Wash hands with plenty of mild soap and water. Wear long-sleeved resistant clothing, remove and discard contaminated clothing immediately.

Respiratory protection: A specific respirator selected must be based on contamination levels of this material found in the workplace and working limits of the respirator. A supplied air, full-face mask, positive pressure or continuous flow respirator or a supplied air hood is required when airborne concentrations are unknown or exceed threshold limit values. A positive pressure,self contained breathing apparatus can be used in emergencies or other unusual situations. Full-face air purifying respirators equipped with organic vapor cartridges can be used in certain situations, ***see OSHA standard 29CFR 1910.134***. All equipment must be NIOSH approved and mainatained.

Skin protection - other: Clothing should be applicable for the job at hand to protect the skin from repeated exposure to the material.

Occupational hygiene practices: Never eat or drink in areas where the chemical is being used. Wash hands after exposure.

9. Physical and chemical properties

Physical state: Viscous Liquid.

Appearance: Amber Liquid

Odor: Ethereal odor.

Odor threshold: No data available.

pH: No data available.

Flash point: > 90°C (200°F)

Notes: After fluoropropane evaporation

Evaporation rate (n-butyl acetate = 1): Slower than ether.

Explosion limit / flammability limit notes: No data available.

Vapor pressure: Not Applicable.

Relative vapor density: Not Applicable.

Density: 10 # / Gallon

Relative density: 1.2

Solubility: Slightly soluble.

Auto-ignition temperature: > (500°F)

Decomposition temperature: >500F.

10. Stability and reactivity

Dangerous polymerization: No hazardous reactions expected with proper storage and handling

Chemical stability: This product is stable and will not hazardously polymerize.

Conditions to avoid: Temperatures over 85F, and contact with incompatible substances.

Possibility of hazardous reactions: Material is designed to rapidly expand on contact with Isocyanate and contains volatile ingredients which can expand with excessive temperatures possible causing pressure build up in drums or other container.

It is advisable to open containers of this material cautiously to relieve any pressure build up.

Hazardous decomposition products: When buned, CO, CO2, NOX aliphatic fragments.

Incompatible materials: Isocyanates and other chemicals that react with hydroxyl groups.

11. Toxicological information

Skin corrosion / irritation: Brief contact may cause moderate skin irritation with local redness.

Serious eye damage / irritation: May cause eye irritation. Corneal injury is unlikely. Vapour may cause eye irritation experienced as mild discomfort and redness.

Respiratory or skin sensitization: May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Carcinogenicity

IARC: No

NTP: No

OSHA: No

General comments: Generally considered as low toxicity, avoid contact with eyes and skin, avoid any direct inhalation of the product.

12. Ecological information

Ecotoxicological information: Not a marine pollutant.

Bioaccumulative potential: Does not bioaccumulate.

Environmental data: No known significant effects.

Comments: While the material has no known significant risks or critical hazards, good stewardship of the environment requires care to not release this material into the soil or water.

13. Disposal considerations

Disposal methods: Polyol Resin component drums/totes can be sent to respective reconditioners or disposed of as ordinary industrial waste in compliance with pertinent regulations.

14. Transport information

USA Department of Transport Regulations (DOT)

UN proper shipping name: Not Regulated

ICAO / IATA - air

UN proper shipping name: Not Regulated

IMO / IMDG - International

UN proper shipping name: Not Regulated

Comments: Not regulated when shipped domestically by land, water or air.

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health hazards: Not yet Known

311/312 Physical hazards: Not yet Known

313 reportable ingredients: No ingredients listed.

TSCA (The Toxic Substances Control Act)

TSCA Status: All Components listed.

California Proposition 65: This product contains no chemicals known to the State of California to cause cancer, and/or birth defects or other reproductive harm:

General comments: The Blowing agent for this material trans-1-chloro-3,3,3-trifluoroprop-1-ene was excluded from regulatory definition of a VOC per 40 CFR part 51 9/27/13

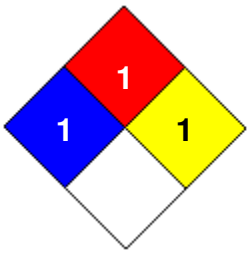
16. Other information

Date Prepared: 04/24/2025

HMIS rating

Health	1
Flammability	1
Physical hazard	1
Personal protection	

NFPA codes



HMIS ratings notes: The customer is responsible for determining the PPE code for this material.

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