

# SES Foam, LLC



SES FOAM, LLC.  
1111 W. LOOP NORTH  
HOUSTON, TX 77055

**SES FIRE FOAM 1.0  
A- MIXTURE**

## Material Safety Data Sheet

**Original Date: 03/1/11**

EMERGENCY TELEPHONE: (800) 424-9300 CHEMTREC  
Phone number is available days, nights, weekends, & holidays.

FOR GENERAL INFORMATION: 412-805-9922

### SECTION 1 - PRODUCT INFORMATION

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Trade Name:	SES FIRE FOAM 1.0 A-MIXTURE
Common Chemical Name:	DIPHENYLMETHANE 4,4' DIISOCYANATE
Synonyms:	MDI, ISO, "A" COMPONENT
Chemical Family:	AROMATIC ISOCYANATE
Molecular Wt.:	VARIES (MIXTURE)

### SECTION 2 - INGREDIENTS

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<u>Chemical Name:</u>	<u>CAS</u>	<u>Amount</u>
DIPHENYLMETHANE 4,4' DIISOCYANATE	101-68-8	25-45
MXED MDI ISOMERS	26447-40-5	<36
P-MDI	9016-87-9	<40%
Proprietary Additive	Proprietary	<40%



## SECTION 3 - PHYSICAL PROPERTIES

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Color:	DARK BROWN
Form\Appearance:	LIQUID
Odor:	MUSTY
Specific Gravity:	1.25 @ 77 F
Boiling Pt:	DECOMPOSES @ 646F (341 C)
Freezing Pt:	BELOW 32 EF
Solubility in Water:	REACTS
Vapor Pressure:	> 1 MILLIBARS @ 77 F
Solubility in other solvents:	SOLUBLE

## SECTION 4 - FIRE AND EXPLOSION DATA

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Flash Point:	425EF
Extinguishing Media:	Use Dry chemical extinguishers such as monoammonium phosphate, potassium sulfate, and potassium chloride. Additionally, carbon dioxide, high expansion (proteinic) chemical foam, and water spray for large fires.
Fire Fighting Procedures:	Firefighters should be equipped with self-contained breathing apparatus and turn out gear. If water is used, use large amounts, as the reaction between hot isocyanates and water can be vigorous.
Unusual Hazards:	Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them.

## SECTION 5 - HEALTH EFFECTS

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Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Toxicology Test Data:	
ORAL LD50	>20g/kg (Rats)
DERMAL LD50	>15.8g/kg (rabbits)
INHALATION LC50 (4HRS)	Approx. 370mg/Cubic Meter (Rats)

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AQUATIC LC50 (24HRS)	>500mg/litre (Daphnia, Limnea Invertebrates, & Zebra Fish)
EYES:	Not irritating (Rabbits) OECD Guidelines
SKIN:	Slight irritation (Rabbits) OECD Guidelines
OTHER:	No conclusive evidence has been developed To indicate that MDI is carcinogenic, teratogenic or that it causes reproductive effects in animals or humans. However, MDI has been reported by NIOSH to be mutagenic to Salmonella Typhimurium Bacteria. There is not full agreement in the scientific community as to the safety of human cancer risks.
ACGIH TLV:	.005 ppm TWA
OSHA PEL:	.02 ppm
Acute Overexposure Effects:	
SKIN:	May cause allergic reaction in susceptible individuals. Prolonged or repeated contact may cause skin irritation. May stain skin.
INHALATION:	May cause respiratory sensitization in susceptible individuals. At room temperature, vapors are minimal due to low vapor pressure. If heated or sprayed as an aerosol, excessive concentrations are attainable that could be hazardous in a single exposure. Excessive exposure may cause irritation of the eyes, upper respiratory tract and lungs. Effects may be delayed. Decreased ventilator capacity has been associated with exposure to similar isocyanates; it is possible that exposure to MDI may cause impairment of lung function.
INGESTION:	This is not a common route of exposure and single dose toxicity is low.
First Aid Procedures - Skin:	Wash affected area with soap and water. Remove and launder contaminated clothing before reuse. Get immediate medical attention.
First Aid Procedures - Eyes:	Immediately rinse eyes with running water for 15 minutes. Get immediate medical attention.
First Aid Procedures - Ingestion:	No adverse effects anticipated by this route of exposure. Incidental to proper industrial handling.
First Aid Procedures - Inhalation:	Move to fresh air. Aid in breathing if necessary and get immediate medical attention.
First Aid Procedures - Notes to Physicians:	

**If breathing is difficult, give oxygen. There is no specific antidote or supportive care. The treatment is based on the judgment of physician in response to reactions**

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of the patient. The manifestations of respiratory symptoms, including pulmonary edema, resulting from acute exposure, may be delayed. May cause respiratory sensitization.

## SECTION 6 - REACTIVITY DATA

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Stability Data:	Stable
Incompatibility:	Water, amines, alcohols, acids, bases
Hazardous Decomposition Products:	CO, CO <sub>2</sub> and Knox, Trace HCN
Hazardous Polymerization:	Does not occur.
Corrosive Properties:	Not corrosive.
Oxidizer Properties:	Not an oxidizer

## SECTION 7 - PERSONAL PROTECTION

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Clothing:	Gloves, coveralls, apron, and boots as necessary to prevent contact.
Eyes:	Chemical goggles; also wear a face shield if splashing hazard exists.
Respiration:	If vapors or mists are generated, wear a NIOSH \ MSHA approved organic vapor \ mist respirator or an air - supplied respirator as appropriate.
Ventilation:	Use local exhaust to control vapors \ mists.

## SECTION 8 - SPILL - LEAK \ ENVIRONMENTAL

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General:	Minor spills should be contained, covered with loose absorbent material such as oil dry, vermiculite, sawdust or Fuller's Earth. Shovel waste material into proper waste containers. <b>Do not</b> make pressure tight. Transport to a well ventilated area and treat with neutralizing solution consisting of a mixture of water and 3-8% concentrated ammonium hydroxide or 5-10% sodium carbonate. Add about 10 parts of neutralizer per part of Isocyanate with mixing. Allow to stand 48 hours letting evolved CO <sub>2</sub> escape. If it is a transportation spill, notify CHEMTREC @ (800) 424-9300. Evacuate and ventilate spill area. Dike spill to prevent entry into the environment. Wear full protective equipment, including respiratory protection during clean up.
Waste Disposal:	Incinerate in a licensed facility or in accordance with local, state and federal regulations. <b>Do not discharge into waterways or sewer systems.</b>
Container Disposal:	Dispose of in a licensed facility. Recommend crushing or other means to prevent unauthorized reuse.
Other Spill \leak Procedures:	Clean up and decontaminate area using water/ammonia solution with 1-2% added detergent, letting it stand over affected area for at least 10 minutes. Cover mops, brooms, etc. used for this with plastic and dispose of properly (often by incineration).



## SECTION 9 - STORAGE AND HANDLING

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General: Keep containers closed and free from moisture.  
Storage Temperature: 40 F – 100 F  
Other Storage and Handling Data: Consult other sections of this MSDS for information on  
Reactivity and flammability

## SECTION 10 - REGULATORY INFORMATION

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TSCA Inventory Status: Listed on Inventory  
RCRA Hazardous Waste Number: NA  
CERCLA Reportable Quantity: NA  
HMIS Hazard Ratings: **Health: 1 Fire: 1 Reactivity: 0 Special: NA**

## SECTION 11 - TRANSPORTATION INFORMATION

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DOT DESCRIPTION/  
SHIPPING NAME: NOT REGULATED BY DEPARTMENT OF  
TRANSPORTATION

DOT HAZARD CLASSIFICATION: NOT-REGULATED

PRODUCT LABEL: Product Label Established

PLACARDS REQUIRED: NONE

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