

# SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Chemical Name	Mixture
Product Name / Trade Name	Open Cell Spray Foam A-Component
CAS No.	Mixture

### Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Component for the manufacture of polyurethane polymers
Uses Advised Against	None

### Details of the supplier of the safety data sheet

Company Identification	SES Foam LLC 4008 Louetta Road #538 Spring, Texas 77388 United States of America <a href="http://www.sesfoam.com">www.sesfoam.com</a>
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Telephone	(713) 239-0252
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### Emergency telephone number

CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887  
(Collect calls accepted)

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)	Acute Tox. 4; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; Resp. Sens. 1; STOT SE 3; STOT RE 2
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### Label elements

#### Hazard Symbol



#### Signal Word(s)

**DANGER**

#### Hazard Statement(s)

H332: Harmful if inhaled.  
H319: Causes serious eye irritation.  
H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335: May cause respiratory irritation.  
H372: Causes damage to organs through prolonged or repeated exposure.  
Inhalation, respiratory system.

**Precautionary Statement(s)**

Prevention

P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P260: Do not breathe dust/fume/gas/mist/vapors/spray.  
 P271: Use only outdoors or in a well-ventilated area.  
 P285: In case of inadequate ventilation wear respiratory protection.  
 P264: Wash (hands and exposed skin) 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.

Response

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P363: Wash contaminated clothing before reuse.  
 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.  
 P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P310: Immediately call a POISON CENTER/doctor.  
 P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P314: Get medical advice/attention if you feel unwell.

Storage

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

P405: Store locked up.

Disposal

P501: Disposal should be in accordance with local, state or national legislation.

**Other hazards**

None

**Additional Information**

None

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Composition/information on ingredients	%W/W	CAS No.	Hazard Statement(s)
Polymethylene polyphenyl isocyanate (PMDI)	30 - 70	9016-87-9	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319
4,4'-Methylenediphenyl diisocyanate (MDI)	30 - 70	101-68-8	Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 STOT RE 1; H372

**Additional Information** - None

**SECTION 4: FIRST AID MEASURES**



**Description of first aid measures**

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Skin Contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation (redness, rash, blistering) develops, get medical attention. Wash contaminated clothing before reuse.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
Ingestion	Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
<b>Most important symptoms and effects, both acute and delayed</b>	May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Indication of any immediate medical attention and special treatment needed</b>	IF SWALLOWED: Immediately call a POISON CENTER/doctor.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

- Suitable Extinguishing Media
- Unsuitable Extinguishing Media

Extinguish with water spray, dry chemical, sand or carbon dioxide.  
None anticipated.

### Special hazards arising from the substance or mixture

Water contamination of product will cause generation of carbon dioxide. Reacts vigorously with water at temperatures above 50 °C. Polymeric MDI decomposes rapidly above 204°C. Closed containers may rupture violently when heated. Forms: carbon monoxide, carbon dioxide, hydrogen cyanide, 4,4'-methylene dianiline, and nitrogen oxides.

### Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Put on protective equipment before entering danger area. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.

### Environmental precautions

Contain spillages with sand, earth or any suitable adsorbent material. Do not allow to enter drains, sewers or watercourses.

### Methods and material for containment and cleaning up

Contain spillages with sand, earth or any suitable adsorbent material. Transfer to a container for disposal or recovery. Wash the spillage area with water. If possible prevent water running into sewers.

### Reference to other sections Additional Information

None  
None

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

Wear protective gloves/protective clothing/eye protection/face protection. Wash hands and exposed skin after use. Do not breathe dust / fume / gas / mist / vapors / spray. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. In case of

inadequate ventilation wear respiratory protection.

**Conditions for safe storage, including any incompatibilities**

- Storage temperature: Store at room temperature. Keep container tightly closed and in a well-ventilated place.
- Incompatible materials: Water, acids, bases, amines, alcohols, organotin catalysts, amides, phenols, mercaptans, urethanes, ureas, surfactants and detergents, and metal compounds. All can react vigorously and violently with this material.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Occupational Exposure Limits**

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
4,4'-Methylenediphenyl diisocyanate	101-68-8	-----	0.005 ppm	0.02 ppm, ceiling	-----	-----

- STEL: Short Term Exposure Limit

**Exposure controls**

**Appropriate engineering controls**

**Aerosol or mist formation:** Local exhaust ventilation is required.

**Personal protection equipment**

Eye/face protection



Goggles giving complete protection to eyes.

Skin protection (Hand protection/ Other)



Gloves (Butyl rubber or Neoprene). **The following to be used as necessary:** Suitable protective clothing. Check with protective equipment manufacturer's data.

Respiratory protection



**Aerosol or mist formation:** In case of inadequate ventilation wear respiratory protection. Check with protective equipment manufacturer's data.

Thermal hazards

Not normally required.

**Environmental Exposure Controls**

Do not allow to enter drains, sewers or watercourses.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

- |  |                    |
|--|--------------------|
| Appearance                               | Viscous liquid     |
| Color.                                   | Dark brown         |
| Odor                                     | Musty, Earthy odor |
| Odor Threshold (ppm)                     | Not available.     |
| pH (Value)                               | Not available.     |
| Melting Point (°C) / Freezing Point (°C) | Not available      |

Boiling point/boiling range (°C):	>204 (Decomposes)
Flash Point (°C)	230 (446°F)
Evaporation Rate	Not available.
Flammability (solid, gas)	Not applicable.
Explosive Limit Ranges	Not available.
Vapour pressure (Pascal)	0.013 @40°C
Vapour Density (Air=1)	Not available
Density (g/ml)	1.25 @ 25°C (10.43 lb/gal @ 25°C)
Specific Gravity	1.25
Solubility (Water)	Insoluble
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not available.
Auto Ignition Point (°C)	230 (446°F)
Decomposition Temperature (°C)	>300
Kinematic Viscosity (cSt)	160 +/- 40 @25°C
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
<b>Other information</b>	Not available.

## SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Stable under normal conditions.
<b>Chemical stability</b>	Stable.
<b>Possibility of hazardous reactions</b>	Polymethylene polyphenyl isocyanate (PMDI) may undergo uncontrolled exothermic polymerization upon contact with incompatible materials or if heated above 175 - 204°C. The resulting pressure build-up could rupture closed containers. May cause some corrosion to copper alloys and aluminum.
<b>Conditions to avoid</b>	Incompatible materials. Avoid contact with: heat and direct sunlight. Protect from moisture.
<b>Incompatible materials</b>	Water, acids, bases, amines, alcohols, organotin catalysts, amides, phenols, mercaptans, urethanes, ureas, surfactants and detergents, and metal compounds. All can react vigorously and violently with this material.
<b>Hazardous decomposition product(s)</b>	Combustion or thermal decomposition will evolve toxic and irritant vapours; acrid smoke. . Forms: carbon monoxide, carbon dioxide, hydrogen cyanide, 4,4'-methylene dianiline, and nitrogen oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact

### Information on toxicological effects

Acute toxicity (estimated / calculated)	Oral: LD50: > 2000 mg/kg (rat) Dermal: LD50: > 2000 mg/kg (rat) Inhalation: 0.3 - 0.49 mg/L
Corrosivity / Irritation	Causes skin irritation. Causes serious eye irritation.
Sensitization	May cause sensitization by skin contact. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Repeated dose toxicity	Causes damage to organs through prolonged or repeated exposure: Inhalation, Respiratory system

Mutagenicity Not to be expected.

Carcinogenicity Not to be expected.

NTP	IARC	ACGIH	OSHA
No.	No.	No.	No.

Toxicity for reproduction Not to be expected.

Other information None known.

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

Acute toxicity

LC50(96 hour): >100 mg/l (fish)  
 EC50(48 hour): >100 (Daphnia magna)  
 EC50 (72 hour): >100 mg/l (algae)

Long Term Toxicity

No data.

### Persistence and degradability

Not readily biodegradable.

### Bioaccumulative potential

The product has no potential for bioaccumulation.

### Mobility in soil

The product has low mobility in soil.

### Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

### Other adverse effects

None known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

### Additional Information

None known.

## SECTION 14: TRANSPORT INFORMATION

	Land transport (U.S. DOT) *	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	Not regulated for ground shipments in non-bulk (>5,000 lbs) packaging or in quantities below the Reportable Quantity	Not classified as dangerous for transport.	
Proper Shipping Name			
Transport hazard class(es)			
Packing group			
Environmental hazards			
Special precautions for user			

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

\* For bulk packages: UN 3082, Environmentally hazardous substance, liquid, n.o.s. (contains 4,4'-Methylenediphenyl diisocyanate (MDI)), 9, III, RQ.

## SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
4,4'-Methylenediphenyl diisocyanate	101-68-8	30 - 70	5000

**SARA 311/312 - Hazard Categories:**
 Fire     Sudden Release     Reactivity     Immediate (acute)     Chronic (delayed)

**SARA 313 - Toxic Chemicals (40 CFR 372):**

Chemical Name	CAS No.	Typical %wt.
Polymethylene polyphenyl isocyanate	9016-87-9	30 - 70
4,4'-Methylenediphenyl diisocyanate	101-68-8	30 - 70

**SARA 302 - Extremely Hazardous Substances(40 CFR 355):**

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)	TPQ (Pounds)
None	-----	-----	-----	-----

**Proposition 65 (California):**

Chemical Name	CAS No.	Typical %wt.	Hazards
None	-----	-----	-----

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements: 1 - 16.

Date of preparation: May 5, 2017

**Hazard Statement(s) Listed in: SECTION 3**

- 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.
- H372: Causes damage to organs through prolonged or repeated exposure: Inhalation, respiratory system.

**Additional Information:** None.

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