SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Chemical Name
Product Name / Trade Name
CAS No.

Mixture
Open Cell Spray Foam A-Component
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

www.sesfoam.com

Telephone
(713) 239-0252

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

Label elements

Hazard Symbol

Signal Word(s)
H332: Harmful if inhaled.

Hazard Statement(s)
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.
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

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

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.

Most important symptoms and effects, both acute and delayed
May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Indication of any immediate medical attention and special treatment needed
IF SWALLOWED: Immediately call a POISON CENTER/doctor.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media
-Suitable Extinguishing Media
  Extinguish with water spray, dry chemical, sand or carbon dioxide.
- Unsuitable Extinguishing Media
  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
None

Additional Information
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

<table>
<thead>
<tr>
<th>SUBSTANCE.</th>
<th>CAS No.</th>
<th>(8hr TWA)</th>
<th>(STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PEL (OSHA)</td>
<td>TLV (ACGIH)</td>
</tr>
<tr>
<td>4,4’-Methylene diphenyl diisocyanate</td>
<td>101-68-8</td>
<td>-----</td>
<td>0.005 ppm</td>
</tr>
</tbody>
</table>

- 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Dark brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Musty, Earthy odor</td>
</tr>
<tr>
<td>Odor Threshold (ppm)</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH (Value)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point (°C) / Freezing Point (°C)</td>
<td>Not available</td>
</tr>
</tbody>
</table>
**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**
Stable under normal conditions.

**Chemical stability**
Stable.

**Possibility of hazardous reactions**
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.

**Conditions to avoid**
Incompatible materials. Avoid contact with: heat and direct sunlight. Protect from moisture.

**Incompatible materials**
Water, acids, bases, amines, alcohols, organotin catalysts, amides, phenols, mercaptans, urethanes, ureas, sulfates and detergents, and metal compounds. All can react vigorously and violently with this material.

**Hazardous decomposition product(s)**
Combustion or thermal decomposition will evolve toxic and irritant vapours; acid smoke. Forms: carbon monoxide, carbon dioxide, hydrogen cyanide, 4,4'-methylenedianiline, and nitrogen oxides.

**SECTION 11: TOXICOLOGICAL INFORMATION**

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

**Information on toxicological effects**

<table>
<thead>
<tr>
<th>Effect Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| **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 |
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) *
Not regulated for ground shipments in non-bulk (>5,000 lbs) packaging or in quantities below the Reportable Quantity

Sea transport (IMDG)
Not classified as dangerous for transport.

Air transport (ICAO/IATA)
Not applicable

UN number
Proper Shipping Name
Transper 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’-Methylene diphenyl 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):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>RQ (Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4’-Methylene diphenyl diisocyanate</td>
<td>101-68-8</td>
<td>30 - 70</td>
<td>5000</td>
</tr>
</tbody>
</table>
SARA 311/312 - Hazard Categories:
- ☑ Fire  ☑ Sudden Release  ☐ Reactivity  ☑ Immediate (acute)  ☐ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymethylene polyphenyl isocyanate</td>
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<td>30 - 70</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>RQ (Pounds)</th>
<th>TPQ (Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>*****</td>
<td>*****</td>
<td>*****</td>
<td>*****</td>
</tr>
</tbody>
</table>

Proposition 65 (California):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>*****</td>
<td>*****</td>
<td>*****</td>
</tr>
</tbody>
</table>

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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