Material Safety Data Sheet (MSDS)

1. PRODUCT AND COMPANY IDENTIFICATION

A. Trade name: Finefoam 245fa series
B. Usage: Industrial Use
C. MANUFACTURER:
DONGSUNGFINETEC CORPORATION
59, Hyeopdongdanji-gil, Miyang-myeon, Anseong-si, Gyeonggi-do,456-843 Rep. of Korea
Tel) 031-678-7155 Fax) 031-677-4002
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2. HAZARDS IDENTIFICATION

BOILING/MELTING POINT @760mm Hg : N/A

EVAPORATION RATE : N/A

VAPOR PRESSURE mm Hg @20 C : N/A

% VOLATILE(VOL) : None

SOLUBILITY IN WATER : None

SPECIFIC GRAVITY(H2O=1) : N/A

REAKTIVITY IN WATER : None

VAPOR DENSITY(AIR=1) : N/A
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS. NO.</th>
<th>%</th>
<th>Exposure Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyurethane Foam</td>
<td>9009-54-5</td>
<td>85-90</td>
<td>Not established</td>
</tr>
<tr>
<td>Fiber glass</td>
<td>65979-17-3</td>
<td>8-11</td>
<td>1 f/cc (OSHA PEL-TWA)</td>
</tr>
<tr>
<td>1,1,1,3,3-Pentafluoropropane</td>
<td>460-73-1</td>
<td>2-4</td>
<td>300 ppm (AIHA TWA-PEL)</td>
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</tbody>
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Reinforced polyurethane foam is a fully cross-linked reaction product of polyester & polyether polyol, isocyanates, fiber glass, Blowing agent.

FLASH POINT (TEST METHOD) : N/A

FLAMMABILITY LIMITS IN AIR (% BY VOL) : N/A

EXTINGUISHING MEDIUM
If polyurethane foam should ignite, extinguish fire immediately by drenching with water spray from a fire hose. For small fires, use water spray, carbon dioxide, or dry chemical extinguishers.

SPECIAL FIRE FIGHTING PROCEDURES
Prepare breathing apparatus for smoke protection and usual body protection. Protect all indoor foam storage areas with fusible sprinkler, maintain a minimum clearance of six feet between top of foam and sprinkler heads.
UNUSUAL FIRE AND EXPLOSION HAZARDS

Reinforced polyurethane foams, in common with other organic materials such as paper, wood, cotton and rubber, can present unreasonable fire risks in certain misapplications when exposed to ignition sources in air. Once ignited, such fires can burn rapidly and produce intense heat, dense smoke and irritating or toxic gases. R-PUF is auto ignited at about 650-800F (343-427C). Carbon dioxide, carbon monoxide, possible traces of hydrogen cyanide, halogen acids, and nitrogen oxides can be evolved under fire conditions. Also, The probability of dust explosions from R-PUF is very high, especially small particles of glass fiber inside foam can be flied and if they are put in men's nose or mouse, can be extremely dangerous for one's respiratory organ. Install foam only after all welding, cutting or other hot work has been completed. If hot work must be done after foam has been installed, the hot work trade personnel must be warned. Remove all combustible material from vicinity and immediately clear away below work area. Post a fire guard equipped with a fire extinguisher. If the smoke is evaporated at foam, immediately clean away from the work area and for contingency, prepare fire extinguishers and protection apparatus.

4. HEALTH HAZARD DATA

Eye: Solid or dust may cause irritation or corneal injury due to mechanical action.

Skin Contact
: Essentially non irritating to skin. But glass fiber can irritate skin. Mechanical injury only.

Skin Absorption
: Skin absorption unlikely due to physical properties.

Ingestion
: Ingestion is unlikely due to physical state. Physical injury only. May cause choking if swallowed.

Inhalation
: dust and glass fiber particle may cause irritation to upper respiratory tract.

Systemic & Other Effects

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Emergency and first Aid Procedures

**Ingestion:** No adverse effects anticipated by the route of exposure.

**Eyes:** Irrigate immediately with water for at least 5 minutes. Mechanical effects only.

**Skin:** Wash off in flowing water or shower.

**Inhalation:** Remove to fresh air if effects occur. Consult a physician.

### 5. REACTIVITY

**STABILITY:** Stable

**MATERIALS TO AVOID:** None known

**Hazardous Decomposition or By-Products**

: Carbon dioxide, carbon monoxide, possible traces of hydrogen cyanide, halogen acids, and nitrogen oxides can be involved under fire conditions.

**Hazardous Polymerizations**

: Will not occur

### 6. ENVIRONMENTAL

**Action to be taken for spills**

: Not applicable

**Disposal Method**

: Bury in an approved landfill according to local, state, and federal regulations. Incinerate using approved method and procedures.
7. TRANSPORT INFORMATION

Packing name: Urethane foam

A. Land transport: Not regulated
B. Inland navigation transport: Not regulated
C. Sea transport: Not regulated
D. Air transport: Not regulated

8. ADDITIONAL INFORMATION

Precautions to be Taken in Handling and Storing:
Potential risks associated with rigid polyurethane foams arise from dust, fire and toxic thermal decomposition products and may result from improper storage, inadequate ventilation, improper disposal and or misapplication. The probability of dust explosions from polyurethane dust is very low. Finely divided dust can cause health risks and can irritate the eyes, nose and throat, as can any other nuisance dust. Avoid exposure to any dust, including foam dust. Conduct rigid foam fabrication operations (sawing, routing, fly cutting, etc) in areas reserved exclusively for such operation. Do not allow dust to accumulate. Use cyclone dust collectors on all fabricating power tools. Keep work areas clean, remove settled dust by vacuuming, not blowing.