1. Chemical Product and Company Identification

ACRYLITE® FF Acrylic Sheet

Supplier:
Evonik CYRO LLC
299 Jefferson Road
Parsippany, NJ 07054-0677
+1-973-929-8291

Product Information Number 1-207-490-4242
24 Hour Emergency Number, CHEMTREC 1-800-424-9300

Product Use: building glazing, light advertising, furniture, trade-fair booth design, displays, decoration, Industrial Use

2. Composition/Information on Ingredients

This material is classified as not hazardous under OSHA regulations.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS Reg. No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>acrylic copolymer</td>
<td>trade secret</td>
<td>100</td>
</tr>
</tbody>
</table>

NJTSR # 56705700001-6897 P

See Section 8, Exposure Controls/Personal Protection

3. Hazards Identification

Emergency Overview

Color: colourless or coloured
Appearance: solid
Odor: odourless

Under normal conditions of use, this product is not expected to create any unusual industrial hazards.

Primary Routes of Exposure
Eye contact (if exposed to chips)
Potential Health Effects

Inhalation
No hazard expected in normal use.

Eye Contact
No hazard expected in normal use. Material can cause the following:
- mechanical irritation

Skin Contact
Material can cause the following:
- cuts (when using cut sheets)

Ingestion
No hazard expected in normal use.

Potential Environmental Effects
See SECTION 12, Ecological Information

4. First Aid Measures

First Aid Procedures

Inhalation
No specific treatment is necessary since this material is not likely to be hazardous by inhalation.

Eye Contact
If mechanical irritation occurs flush eyes thoroughly with a large amount of water, consult a physician if irritation persists. (possible during machining processes)

Skin Contact
No specific treatment is necessary since this material is not likely to be hazardous.

Ingestion
Ingestion is not considered a potential route of exposure.

5. Fire-Fighting Measures

Flash point
> 250 °C (ASTM D 1929-68)
> 482 °F (ASTM D 1929-68)

Ignition temperature
> 400 °C (ASTM D 1929-68)
> 752 °F (ASTM D 1929-68)

Lower explosion limit
not applicable

Upper explosion limit
not applicable

OSHA Flammability Classification
none

Other Flammable Properties
Use water spray to cool containers exposed to fire.

Unusual Hazards
In case of fire partly flammable, partly harmful vapours, which are irritating to the eyes and respiratory system, may be formed on thermal decomposition.

Extinguishing Media
Use the following extinguishing media when fighting fires involving this material:
water spray - foam - dry chemical - carbon dioxide
Fire Fighting Procedures
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Procedures
Collect material and place in a disposal container. Obey relevant local, state, provincial and federal laws and regulations.
Should not be released into the environment. Sweep up unusable residues and dispose of.
See Material Safety Data Sheet section 8, Exposure Controls/Personal Protection.

7. Handling and Storage

Handling
Avoid dust formation. During thermoplastic processing, vapours of the decomposition products referred to in section 10 are given off, which are technically unavoidable (Observe exposure threshold limit values). During thermal processing and/or machining local exhaust ventilation at processing machines is necessary.

Storage
Storage: dry.

8. Exposure Controls/Personal Protection

Exposure Limit Information

ACRYLIC COPOLYMER
trade secret
No Occupational Exposure Values established (ACGIH, OSHA, Canada and Mexico).

DICHLOROMETHANE
(CAS Number 75-09-2)
Carcinogen designation(s) USA: EPA-B2; IARC-2B; NIOSH-Ca; NTP-R; OSHA-Ca; TLV-A3

Occupational Exposure Values:

<table>
<thead>
<tr>
<th>Exposure Limit Information</th>
<th>50 ppm</th>
<th>174 mg/m3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH TLV-TWA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH TLV- STEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA PEL-TWA</td>
<td>25 ppm</td>
<td></td>
</tr>
<tr>
<td>OSHA PEL- STEL</td>
<td>125 ppm</td>
<td></td>
</tr>
<tr>
<td>OEL-TWA (Alberta)</td>
<td>50 ppm</td>
<td>174 mg/m3</td>
</tr>
<tr>
<td>OEL- STEL (Alberta)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEL-TWA (British Columbia)</td>
<td>25 ppm</td>
<td>IARC Carcinogen rating: 2B (Possible human carcinogen)</td>
</tr>
<tr>
<td>OEL-STE L (British Columbia)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OEL-TWA (Ontario)</td>
<td>50 ppm</td>
<td>175 mg/m3</td>
</tr>
<tr>
<td>OEL- STEL (Ontario)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remark(s): not established
### Engineering Controls (Ventilation)
If use operations generate dust, use adequate ventilation.

### Respiratory Protection
A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

### Eye Protection
- goggles for machining operations

### Hand Protection
- protective gloves against mechanical risks

### Other Protective Equipment
- A safety shower and eye wash fountain should be readily available.
- To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>colourless or coloured</td>
</tr>
<tr>
<td>Physical state</td>
<td>solid</td>
</tr>
<tr>
<td>Odor</td>
<td>odourless</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 250 °C ( ASTM D 1929-68 )</td>
</tr>
<tr>
<td></td>
<td>&gt; 482 °F ( ASTM D 1929-68 )</td>
</tr>
<tr>
<td>pH-value</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity (dynamic)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Specific gravity (water = 1)</td>
<td>1.19 g/cm3 at 20 °C / 68 °F</td>
</tr>
<tr>
<td>Vapor density (air = 1)</td>
<td>not applicable Vapor</td>
</tr>
<tr>
<td>pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Softening Temperature</td>
<td>approx. 102 °C / 216 °F</td>
</tr>
<tr>
<td>Boiling Temperature</td>
<td>not applicable</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>insoluble</td>
</tr>
<tr>
<td>Bulk density</td>
<td>not available</td>
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</tbody>
</table>
10. Stability and Reactivity

Stability
This material is considered stable under specified conditions of storage, shipment and/or use.

Conditions To Avoid
High temperature. Depolymerization begins at 250 °C / 482 °F.

Incompatibility With Other Materials
None reasonably foreseeable.

Hazardous Decomposition Products
In case of thermal decomposition, combustible vapours are formed, which are irritating to eyes and respiratory system, mainly consisting of: methyl methacrylate

Hazardous Polymerization
No hazardous reactions known.

11. Toxicological Information

Acute Oral Toxicity
no specific test data available no evidence for hazardous properties (structure-activity-relationships) (analogy)

Irritant Effect on the Skin
no specific test data available no evidence for hazardous properties (structure-activity-relationships) (analogy)

Irritant Effect on the Eyes
no specific test data available no evidence for hazardous properties (structure-activity-relationships) (analogy)

Sensitization
no specific test data available no evidence for hazardous properties (structure-activity-relationships) (analogy)

Mutagenicity
no specific test data available no evidence for hazardous properties (structure-activity-relationships) (analogy)

Carcinogenicity
no specific test data available
no evidence for hazardous properties
(structure-activity-relationships)
(analogy)

Reprotoxicity / teratogenicity
no specific test data available
no evidence for hazardous properties
(structure-activity-relationships)
(analogy)

Further Information on Toxicology
The product has not been tested toxicologically. When handled and used as directed the product will not cause hazardous effects to health according to studies on similar products and practical experience. The fine particles contained in the product may cause mechanical irritations of the skin, eyes and mucous membranes. Avoid skin and eye contact and inhalation of product dust/aerosols.

12. Ecological Information
Information on Elimination (Persistence and Degradability)
Bioaccumulation

Ecotoxicological Effect
Further Information on Ecology
The product has not been tested ecotoxicologically. On the basis of the products consistency as well as its low water solubility is unlikely. Studies confirm this assumption. Do not allow to enter soil, waterways or waste water.

13. Disposal Considerations

Procedures
Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method. CYRO encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste.

14. Transport Information

US DOT Hazard Classification
Not subject to the regulations on dangerous goods.

Canadian TDG Classification
Refer to the classification US DOT

Shipment by sea IMDG/GGVSSee
Not a dangerous good within the meaning of transportation regulations.

Air transport ICAO/IATA
Not a dangerous good within the meaning of transportation regulations.
15. Regulatory Information

INVENTORY INFORMATION

REACH (EU)          preregistered, registered or exempted
TSCA (USA)          listed or exempted
DSL (CDN)           listed or exempted

US FEDERAL REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Component / CASRN</th>
<th>TPQ [lbs]</th>
<th>CERCLA/RQ [lbs]</th>
<th>SARA 302 List of EHS</th>
<th>SARA 313 (40CFR372)</th>
<th>TSCA 12b</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
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</table>

COMPONENT CLASSIFICATION UNDER CLEAN AIR ACT SECTION 112

<table>
<thead>
<tr>
<th>Component / CASRN</th>
<th>Weight %</th>
<th>HAP</th>
<th>EHAP</th>
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</thead>
<tbody>
<tr>
<td>NONE</td>
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</table>

PRODUCT CLASSIFICATION UNDER SECTION 311/312 OF SARA (40CFR370)

<table>
<thead>
<tr>
<th>Component / CASRN</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
</tr>
</tbody>
</table>

US STATE REGULATORY INFORMATION

New Jersey

Pennsylvania

Massachusetts

California

California

Component / CASRN: acrylic polymer / trade secret

NO NO NO NO NO NO

This product contains (a) chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

CANADIAN REGULATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation and the MSDS contains all information required by the Controlled Products Regulations.

This is a non-controlled product.

WHMIS: NO

<table>
<thead>
<tr>
<th>Component / CASRN</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
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</tr>
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</table>
16. Other Information

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
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</thead>
<tbody>
<tr>
<td>HMIS-Ratings</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NFPA-Ratings</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**HMIS Hazard Ratings**

- 4 = severe
- 3 = serious
- 2 = moderate
- 1 = slight
- 0 = minimal
- N = no rating for powders
- * = chronic health hazard

**NFPA Hazard Ratings**

- 4 = extreme
- 3 = high
- 2 = moderate
- 1 = slight
- 0 = insignificant
- N = no rating for powders

This MSDS was prepared in accordance with ANSI Z400.1-1998.