

Material Safety Data Sheet

Update: 12/10/2015

Version: 1.0



ACRYLITE® Acrylic Molding and Extrusion Compounds

Page 1 of 7

1. Chemical Product and Company Identification

ACRYLITE® Acrylic Molding and Extrusion Compounds

Synonyms: Polymethylmethacrylate; PMMA

Supplier:

Evonik CYRO LLC
299 Jefferson Road
Parsippany, NJ 07054-0677
USA

973-929-8000
973-929-8040 (fax)

1-973-929-8060 (Product Information Number)
1-800-424-9300 (24 Hour Emergency Number, CHEMTREC)

® is a registered trademark

Product Use: molding compound for injection molding and extrusion

2. Composition/Information on Ingredients

This material is classified as not hazardous under OSHA regulations.

<u>Ingredients</u>	<u>CAS Reg. No.</u>	<u>Weight %</u>
acrylic copolymer	trade secret	> 95

See Section 8, Exposure Controls/Personal Protection

3. Hazards Identification

Emergency Overview

Color: colourless or coloured
Appearance: Pellets
Odor: odourless

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

Primary Routes of Exposure

Skin contact
Eye contact

Potential Health Effects

Inhalation

Dust of material can cause the following:
- mechanical irritation

Eye Contact

No hazard expected in normal use.
Dust of material can cause the following:
- mechanical irritation

Material Safety Data Sheet

Update: 12/10/2015

Version: 1.0



ACRYLITE® Acrylic Molding and Extrusion Compounds

Page 2 of 7

Skin Contact

No hazard expected in normal use.

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.

Skin Contact

After contact with melted product cool quickly with cold water. See a physician.

Ingestion

Ingestion is not considered a potential route of exposure.

Note to Physician

No hazards known.

None known

5. Fire-Fighting Measures

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

Ignition temperature no data available

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:

foam - dry chemical - carbon dioxide - water spray

Fire Fighting Procedures

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Material Safety Data Sheet

Update: 12/10/2015

Version: 1.0



6. Accidental Release Measures

Procedures

Collect material and place in a disposal container. Obey relevant local, state, provincial and federal laws and regulations.

Avoid release to the environment.

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 recommended.

Storage

Store in a dry place.

8. Exposure Controls/Personal Protection

Exposure Limit Information

ACRYLIC COPOLYMER

trade secret

No Occupational Exposure Values established (ACGIH, OSHA, Canada and Mexico).

DUST, PARTICULATES

Occupational Exposure Values :

Remark(s):

Occupational Exposure Values :			Remark(s):
ACGIH TLV-STEL			not established
OSHA PEL-TWA	50 mppcf		(total dust)
OSHA PEL-TWA	15 mppcf		(respirable dust)
OSHA PEL-STEL			not established
OEL-TWA (Alberta)		10 mg/m3	(total dust)
OEL-TWA (Alberta)		3 mg/m3	(respirable dust)
OEL-STEL (Alberta)			not established
OEL-TWA (British Columbia)		3 mg/m3	(respirable dust)
OEL-TWA (British Columbia)		10 mg/m3	(total dust)
OEL-STEL (British Columbia)			not established
OEL-TWA (Ontario)		10 mg/m3	(inhalable)
OEL-TWA (Ontario)		3 mg/m3	(respirable)
OEL-TWA (Quebec)		10 mg/m3	(total dust)
OEL-STEL (Quebec)			not established
OEL-TWA (Mexico)		10 mg/m3	(total dust)
OEL-STEL (Mexico)			not established

Engineering Controls (Ventilation)

If use operations generate dust, use adequate ventilation.

Material Safety Data Sheet

Update: 12/10/2015

Version: 1.0



Respiratory Protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Eye Protection

Use safety glasses (ANSI Z87.1 or approved equivalent).

Hand Protection

General use gloves are recommended to protect the skin from drying and irritation.

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

Appearance	colourless or coloured
Physical state	Pellets
Odor	odourless
Flash point	> 250 °C (ASTM D 1929-68) > 482 °F (ASTM D 1929-68)
pH-value	not applicable
Viscosity (dynamic)	not applicable
Viscosity (kinematic)	not applicable
Specific gravity (water = 1)	ca. 1.19 g/cm ³ at 20 °C / 68 °F
Vapor density (air = 1)	not applicable
Vapor pressure	not applicable
Softening Temperature	ca. 108 °C / 226 °F not applicable
Solubility in water	insoluble
Bulk density	no data available
Solubility (quantitative)	no data available
Solubility (qualitative)	in e.g. esters, ketones and chlorinated hydrocarbons: readily soluble
n-Octanol/water partition coefficient	not applicable
Evaporation rate	not applicable
Odor threshold	no data available
Further information	Dust explosions are generally to be expected with dust-forming organic products.

See Section 5, Fire Fighting Measures

10. Stability and Reactivity

Stability

This product is stable under normal storage conditions. No decomposition if stored and applied as directed. Depolymerization begins at 250 °C / 482 °F.

Material Safety Data Sheet

Update: 12/10/2015

Version: 1.0



ACRYLITE® Acrylic Molding and Extrusion Compounds

Page 5 of 7

Conditions To Avoid

High temperature.

Incompatibility With Other Materials

No known incompatibility with other materials.

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 dangerous 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

Material Safety Data Sheet

Update: 12/10/2015

Version: 1.0



ACRYLITE® Acrylic Molding and Extrusion Compounds

Page 6 of 7

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 a bioavailability is unlikely. Studies on products with similar composition confirm this assumption. Prevent substance from entering soil, natural bodies of water and sewer systems.

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

Further information

Not subject to the regulations on dangerous goods.

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

Component / CASRN	TPQ [lbs]	CERCLARQ [lbs] (40CFR302.4)	SARA 302 List of EHS	SARA 313 (40CFR372)	TSCA 12b
NONE					

COMPONENT CLASSIFICATION UNDER CLEAN AIR ACT SECTION 112

Component / CASRN	Weight %	HAP	EHAP
NONE			

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

NONE

US STATE REGULATORY INFORMATION

Component / CASRN	New Jersey RTK	Pennsylvania RTK	Massachusetts RTK	California Proposition 65 Cancer	California Proposition 65 Reproductive
acrylic copolymer / trade secret	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.

Material Safety Data Sheet

Update: 12/10/2015

Version: 1.0



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

Component / CASRN

NPRI

NONE

16. Other Information

	Health	Flammability	Physical Hazard
HMIS-Ratings	0	1	0
NFPA-Ratings	0	1	0

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.

Places marked by **II** have been amended from the last version.

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