



Impact Modified Acrylic
Material Safety Data Sheet

1 Product Identification: DR ACRYLIC

Product Name PLEXIGLAS® DR-101
Product Synonym
Chemical Family Acrylic Copolymers
Chemical Formula N/A
Chemical Name See Ingredients
EPA Reg Num
Product Use

2 Composition/Information on Ingredients

<u>Ingredient Name</u>	<u>CAS Registry Number</u>	<u>Typical Wt.%</u>	<u>OSHA</u>
P(EA/MMA)	Proprietary	50-54	N
Acrylic Styrene Copolymer	Proprietary	35-50	N
Methyl methacrylate	80-62-6	<0.5	Y
Ethyl acrylate	140-88-5	<0.1	Y

The substance(s) marked with a “Y” in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

While this material is not classified as hazardous under Federal OSHA regulations, this MSDS contains valuable information critical to the safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of this product.

The components of this product are all on the TSCA Inventory list.

3 Hazards Identification

Emergency Overview

Clear to colorless pellets with mild odor

CAUTION! MELT PROCESSING RELEASES VAPORS WHICH MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Potential Health Effects

Skin contact and inhalation of dust are expected to be the primary routes of occupational exposure to this material. As a finished product, it is a synthetic, high molecular weight polymer pellet. Due to its chemical and physical properties, this material does not require special handling other than the good industrial hygiene and safety practices employed with any industrial material of this type.

Ethyl acrylate is classified as possibly carcinogenic to humans (Group 2B) by the International Agency for Research.

4 First Aid Measures

IF IN EYES, immediately flush with plenty of water. Get medical attention if irritation persists.

IN CASE OF CONTACT, flush the area with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops and persists.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

5 Fire Fighting Measures

Fire and Explosive Properties

Auto-Ignition Temperature	393 C/739 F
Flash Point	NA
Flammable Limits-Upper	NA
Lower	NA

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

Fire and Explosion Hazards

Heated material can form flammable vapors with air.

6 Accidental Release Measures

In Case of Spill or Leak

Contain Spill. Sweep or scoop up and remove to suitable container. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

7 Handling and Storage

Handling Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation.

Storage Avoid temperature extremes during storage; ambient temperature preferred.

8 Exposure Controls/Personal Protection

Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Eye/Face Protection

Use good industrial practice to avoid eye contact.

Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Rinse contaminated skin promptly. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Respiratory Protection

Avoid breathing dust. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR 1910.134.

Airborne Exposure Guidelines for Ingredients

Exposure Limit	Value
Ethyl acrylate	
ACGIH STEL	15 ppm; 61 mg/m ³
ACGIH TWA	5 ppm 20 mg/m ³
OSHA Skin designator	Y
OSHA TWA PEL	25 ppm 100 mg/m ³
Methyl methacrylate	
ACGIH Sensitizer Designator	Y
ACGIH STEL	100 ppm (410 mg/m ³)
ACGIH TWA	50 ppm (205 mg/m ³)
OSHA TWA PEL	100 ppm (410 mg/m ³)

-Only those components with exposure limits are printed in this section.

-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.

-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.

-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

9 Physical and Chemical Properties

Appearance/Odor	Clear to colorless pellets with mild odor
pH	N/A
Specific Gravity	1.15 to 1.19
Vapor Pressure	N/A
Vapor Density	N/A
Melting Point	132 C/270 F min. pour pt.
Freezing Point	N/A
Boiling Point	N/A
Solubility in Water	insoluble
Percent Volatile	0

10 Stability and Reactivity

Stability: This material is chemically stable under normal and anticipated storage and handling conditions.

Hazardous Polymerization: Does not occur.

Incompatibility: Prolonged contact with acids, alkalies and strong oxidizing agents may attack or dissolve the polymer.

Hazardous Decomposition Products: Thermal decomposition may yield acrylic monomers.

Thermal decomposition begin to generate monomer vapor >300 deg. C.

11 Toxicological Information

Toxicological Information: No data are available.

12 Ecological Information

Ecotoxicological Information: No data are available.

Chemical Fate Information: No data are available.

13 Disposal Considerations

Waste Disposal: Incineration is the recommended method for disposal observing all local, state and federal regulations.

14 Transport Information

DOT Name	NOT REGULATED
DOT Technical Name	
DOT Hazard Class	
UN Number	
DOT Packing Group	PG
RQ	

15 Regulatory Information

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute)Health	N	Fire	N
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

The components of this product are all on the TSCA Inventory list.

Ingredient Related Regulatory Information:

SARA Reportable Quantities	CERCLA RQ	SARA TPQ
Ethyl acrylate	1000 LBS	NE
Methyl methacrylate	1000 LBS	
P (EA/MMA)	NE	

SARA Title III, Section 313

This product does contain chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. See Section 2.

Ethyl acrylate

Methyl methacrylate

California Prop 65 – Carcinogen

This product does contain the following chemical(s), as indicated below, currently on the California list of Known Carcinogens, Ethyl acrylate

Massachusetts Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

Ethyl acrylate

Methyl methacrylate

New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right to Know Substances List.

Ethyl acrylate

Methyl methacrylate

Pennsylvania Environmental Hazard

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Environmental Hazard List.

Ethyl acrylate

Methyl methacrylate

Pennsylvania Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.

Ethyl acrylate

Methyl methacrylate

Pennsylvania Special Hazard

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Special Hazard List.
Ethyl acrylate

16 Other Information

Revision Date	11 OCT 2004	Revision Number 8
Supersedes Revision Dated	01 OCT 2001	

Key

NE=Not Established NA=Not Applicable ®=Registered Trademark

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