

**PLEXIGLAS® DR IMPACT GRADE**

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Company**

Arkema Inc.  
900 First Avenue  
King of Prussia, Pennsylvania 19406

Altuglas International

Customer Service Telephone Number: (800) 523-1532  
(Monday through Friday, 8:00 AM to 5:00 PM EST)

**Emergency Information**

Transportation: CHEMTREC: (800) 424-9300  
(24 hrs., 7 days a week)

Medical: Rocky Mountain Poison Center: (866) 767-5089  
(24 hrs., 7 days a week)

**Product Information**

Product name: PLEXIGLAS® DR IMPACT GRADE  
Synonyms: Not available  
Molecular formula: Mixture  
Chemical family: Acrylic copolymers  
Product use: Polymers industry, Special applications, in general

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Color: brown  
Physical state: solid  
Form: pellets  
Odor: Slightly acrylic

**\*Classification of the substance or mixture:**  
Not a hazardous substance or mixture.

**GHS-Labeling**

**Supplemental Hazard Statements:**

Processing may release vapors and/or fumes which cause eye, skin and respiratory tract irritation.

**Supplemental information:**

**Potential Health Effects:**

The product, in the form supplied, is not anticipated to produce significant adverse human health effects.  
Contains polymer(s). Effects due to processing releases or residual monomer: Irritating to eyes, respiratory system and skin.  
Prolonged or repeated exposure may cause: headache, drowsiness, nausea, weakness.(severity of effects

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depends on extent of exposure) .

**Other:**

Handle in accordance with good industrial hygiene and safety practice. (pellets/granules) This product may release fume and/or vapor of variable composition depending on processing time and temperature.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No.	Wt/Wt	GHS Classification**
Acrylic copolymers	Proprietary*	>= 30 - < 60 %	Not classified
Acrylic styrene copolymers	Proprietary*	>= 30 - < 60 %	Not classified
Acrylic copolymer	Proprietary*	>= 1 - < 5 %	Not classified
Titanium oxide (TiO2)	13463-67-7	>= 1 - < 5 %	Not classified

\*The specific chemical identity is withheld because it is trade secret information of Arkema Inc.

\*\*For the full text of the H-Statements mentioned in this Section, see Section 16.

**4. FIRST AID MEASURES**

**Inhalation:**

If inhaled, remove victim to fresh air.

**Skin:**

In case of contact, immediately flush skin with plenty of water. If molten polymer gets on the skin, cool rapidly with cold water. Do not peel solidified product off the skin. Obtain medical treatment for thermal burns. Remove material from clothing. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eyes:**

Immediately flush eye(s) with plenty of water. Obtain medical treatment for thermal burns.

**Ingestion:**

If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

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**5. FIREFIGHTING MEASURES**

**Extinguishing media (suitable):**

Water spray, Carbon dioxide (CO<sub>2</sub>), Foam, Dry chemical

**Protective equipment:**

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).

**Further firefighting advice:**

Fire fighting equipment should be thoroughly decontaminated after use.

**Fire and explosion hazards:**

Heated material can form flammable vapors with air.

When burned, the following hazardous products of combustion can occur:

Carbon oxides

Hazardous organic compounds

**6. ACCIDENTAL RELEASE MEASURES**

**In case of spill or leak:**

Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Sweep up and shovel into suitable properly labeled containers for prompt disposal. Possible fall hazard – floor may become slippery from leakage/spillage of product. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. 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**

**General information on handling:**

Avoid breathing dust.

Avoid breathing processing fumes or vapors.

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing.

**Storage**

**General information on storage conditions:**

This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

**Storage incompatibility – General:**

Store away from sources of heat and light.



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<b>Physical state:</b>	solid
<b>Form:</b>	pellets
<b>Odor:</b>	Slightly acrylic
<b>Odor threshold:</b>	No data available
<b>Flash point</b>	Not applicable
<b>Auto-ignition temperature:</b>	739 °F (393 °C)
<b>Lower flammable limit (LFL):</b>	Not applicable
<b>Upper flammable limit (UFL):</b>	Not applicable
<b>pH:</b>	Not applicable
<b>Density:</b>	1.15 g/cm <sup>3</sup>
<b>Specific Gravity (Relative density):</b>	1.15 - 1.19 Water=1 (liquid)
<b>Vapor pressure:</b>	Not applicable
<b>Vapor density:</b>	Not applicable
<b>Evaporation rate:</b>	No data available
<b>Solubility in water:</b>	insoluble
<b>Oil/water partition coefficient:</b>	No data available
<b>Thermal decomposition</b>	No data available
<b>Flammability:</b>	See GHS Classification in Section 2

<b>10. STABILITY AND REACTIVITY</b>
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**Stability:**

The product is stable under normal handling and storage conditions.

**Hazardous reactions:**

Hazardous polymerization does not occur.

**Materials to avoid:**

None under normal conditions of use.

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**Conditions / hazards to avoid:**

Avoid flames, welding arcs, potential ignition sources, or other high temperature sources which induce thermal decomposition.

**Hazardous decomposition products:**

Thermal decomposition giving flammable and toxic products:

Carbon oxides

Acrylates

Methacrylates

Hazardous organic compounds

**11. TOXICOLOGICAL INFORMATION**

Data on this material and/or its components are summarized below.

**Data for Acrylic copolymers (Proprietary)**

**Other information**

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

Effects due to processing releases or residual monomer:

Possible cross sensitization with other acrylates and methacrylates

**Data for Acrylic styrene copolymers (Proprietary)**

**Other information**

The information presented is from a representative material with a similar structure. The results vary depending on the size and composition of the test substance.

Effects due to processing releases or residual monomer:

Possible cross sensitization with other acrylates and methacrylates

**Data for Acrylic copolymer (Proprietary)**

**Acute toxicity**

**Oral:**

Practically nontoxic. (Rat) LD50 = 8,000 mg/kg. (similar material)

**Genotoxicity**

**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, human cells

**Genotoxicity**

**Assessment in Vivo:**

No genetic changes were observed in laboratory tests using: animals

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**Other information**

Biocompatibility testing for this polymer or its extracts has generally shown that the material is inert. The information presented is from representative materials with this Chemical Abstract Service (CAS) Registry number. The results vary depending on the size and composition of the test substance. Effects due to processing releases or residual monomer:  
Possible cross sensitization with other acrylates and methacrylates

**Human experience**

**Skin contact:**

Skin: Irritant but not a sensitizer. Mechanical irritation. (studied using human volunteers)

**Data for Titanium oxide (TiO<sub>2</sub>) (13463-67-7)**

**Acute toxicity**

**Oral:**

No deaths occurred. (rat) LD<sub>0</sub> > 5,000 mg/kg.

**Dermal:**

Practically nontoxic. (rabbit) LD<sub>50</sub> > 10,000 mg/kg.

**Inhalation:**

Practically nontoxic. (rat) 4 h LC<sub>0</sub> > 6.82 mg/l.

**Skin Irritation:**

Practically non-irritating. (rabbit) Irritation Index: 0 - 0.28/8.0.

**Eye Irritation:**

Causes mild eye irritation. (rabbit)

**Skin Sensitization:**

Not a sensitizer. LLNA: Local Lymph Node Assay. (mouse) No skin allergy was observed

Not a sensitizer Buehler Test. (guinea pig) No skin allergy was observed

**Repeated dose toxicity**

Subchronic inhalation administration to rat / affected organ(s): respiratory tract / Local irritation of the respiratory system

Subchronic oral administration to rat / No adverse effects reported.

**Carcinogenicity**

Chronic dietary administration to rat and mouse / signs: No increase in tumor incidence was reported.

Chronic inhalation administration to rat / affected organ(s): lung / signs: Increase in tumor incidence was reported.

Classified by the International Agency for Research on Cancer as: Group 2B: Possibly carcinogenic to humans.

**Genotoxicity**

**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells, yeast

**Genotoxicity**

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**Assessment in Vivo:**

No genetic changes were observed in laboratory tests using: mice, rats

**Other information**

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

**Human experience**

**Skin contact:**

Skin: No skin allergy was observed. (studied using human volunteers)

**12. ECOLOGICAL INFORMATION**

**Chemical Fate and Pathway**

No data are available.

**Ecotoxicology**

Data on this material and/or its components are summarized below.

**Data for Titanium oxide (TiO<sub>2</sub>) (13463-67-7)**

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

**Aquatic toxicity data:**

No effect up to the limit of solubility. *Oncorhynchus mykiss* (rainbow trout) 96 h LC<sub>50</sub> > 100 mg/l (nominal concentrations reported)

No effect up to the limit of solubility. *Pimephales promelas* (fathead minnow) 96 h LC<sub>50</sub> > 1,000 mg/l (nominal concentrations reported)

**Aquatic invertebrates:**

No effect up to the limit of solubility. *Daphnia magna* (Water flea) 96 h EC<sub>50</sub> > 100 mg/l (nominal concentrations reported)

**Algae:**

Harmful. *Pseudokirchneriella subcapitata* (green algae) 72 h EC<sub>50</sub> = 61 mg/l (Nominal concentration)

**Microorganisms:**

Practically nontoxic. *Pseudomonas fluorescens* 24 h EC<sub>0</sub> > 10,000 mg/l

Practically nontoxic. Activated sludge 3 h EC<sub>0</sub> > 1,000 mg/l

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal:**

Where possible recycling is preferred to disposal or incineration. If recycling is not an option, incinerate or dispose of in accordance with federal, state, and local regulations. Pigmented, filled and/or solvent laden product may require special disposal practices in accordance with federal, state and local regulations. 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. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.



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**14. TRANSPORT INFORMATION**

**US Department of Transportation (DOT):** not regulated

**International Maritime Dangerous Goods Code (IMDG):** not regulated

**15. REGULATORY INFORMATION**

**Chemical Inventory Status**

EU. EINECS	EINECS	Does not conform
United States TSCA Inventory	TSCA	The components of this product are all on the TSCA Inventory.
Canadian Domestic Substances List (DSL)	DSL	This product contains one or several components listed in the Canadian NDSL list. All other components are on the DSL list.
China. Inventory of Existing Chemical Substances in China (IECSC)	IECSC (CN)	Does not conform
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	Does not conform
Japan. ISHL - Inventory of Chemical Substances	ISHL (JP)	Does not conform
Korea. Korean Existing Chemicals Inventory (KECI)	KECI (KR)	Conforms to
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	The mixture contains a polymer. The monomers for this polymer have been notified., Does not conform
Australia Inventory of Chemical Substances (AICS)	AICS	Does not conform

**United States – Federal Regulations**

**SARA Title III – Section 302 Extremely Hazardous Chemicals:**

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

**SARA Title III - Section 311/312 Hazard Categories:**

No SARA Hazards

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**SARA Title III – Section 313 Toxic Chemicals:**

The following components are subject to reporting levels established by SARA Title III, Section 313:

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>De minimis concentration</u>	<u>Reportable threshold:</u>
2-Propenoic acid, ethyl ester	140-88-5	0.1 %	10000 lbs (Otherwise used (non-manufacturing/processing)) 25000 lbs (Manufacturing and processing)

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantity (RQ):**

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Reportable quantity</u>
2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	1000 lbs
2-Propenoic acid, ethyl ester	140-88-5	1000 lbs

**United States – State Regulations**

**New Jersey Right to Know**

<u>Chemical Name</u>	<u>CAS-No.</u>
Titanium oxide (TiO <sub>2</sub> )	13463-67-7

**Pennsylvania Right to Know**

<u>Chemical Name</u>	<u>CAS-No.</u>
Acrylic copolymers	Proprietary
Acrylic styrene copolymers	Proprietary
Titanium oxide (TiO <sub>2</sub> )	13463-67-7
2-Propenoic acid, ethyl ester	140-88-5

**Pennsylvania Right to Know – Environmentally Hazardous Substance(s)**

<u>Chemical Name</u>	<u>CAS-No.</u>
2-Propenoic acid, ethyl ester	140-88-5

**Pennsylvania Right to Know – Special Hazardous Substance(s)**

<u>Chemical Name</u>	<u>CAS-No.</u>
2-Propenoic acid, ethyl ester	140-88-5

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**California Prop. 65**

WARNING! This product contains a chemical known to the State of California to cause cancer.

<u>Chemical Name</u>	<u>CAS-No.</u>
2-Propenoic acid, ethyl ester	140-88-5
Cadmium oxide (CdO)	1306-19-0
Carbon black	1333-86-4
Titanium oxide (TiO <sub>2</sub> )	13463-67-7

**California Prop. 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<u>Chemical Name</u>	<u>CAS-No.</u>
Methanol	67-56-1
1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7
Cadmium oxide (CdO)	1306-19-0

**16. OTHER INFORMATION**

Full text of H-Statements referred to under sections 2 and 3.

**Latest Revision(s):**

Reference number: 00000094700  
Date of Revision: 05/28/2015  
Date Printed: 05/28/2015

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