

# Duraplex Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Trade Name: DURAPLEX® Impact Modified Acrylic Sheet

Other Name(s): Includes Impact Modified (IM) Polymethyl Methacrylate (PMMA) Sheet, Duralens Acrylic Lighting Sheet, DURAPLEX® SG05/SG10 Acrylic Sheet.

Usage: Plastic sheet products

## 2. HAZARDS IDENTIFICATION

**This material is classified as not hazardous under OSHA regulations.** Under normal conditions of use, this product is not expected to create any unusual industrial hazards. Irritating gases/fumes may be given off during burning or thermal decomposition. Contact with hot material will cause thermal burns.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization: < 94% Polymethyl methacrylate (PMMA) [CAS# 9010-88-2]  
> 6% Acrylic styrene copolymer [Proprietary]

## 4. FIRST AID MEASURES

Inhalation: Move subject to fresh air.

Skin Contact: If molten material contacts skin, cool rapidly with cold water and obtain medical attention for thermal burn.

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Call a physician.

Ingestion: This material is not expected to be absorbed within the gastrointestinal tract, so induction of vomiting should not be necessary.

## 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Carbon dioxide, dry chemical, or water.

Specific Fire Hazards: This product is a combustible thermoplastic material that burns vigorously with intense heat.

Special Protective Equipment & Precaution for Fire Fighters: Wear a self-contained breathing apparatus and full protective gear.



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## **6. ACCIDENTAL RELEASE MEASURES**

- Personal Precaution: Provide adequate ventilation. Wear personal protection equipment. Do not breathe dust.
- Environmental Precaution: Do not allow to enter into soil, waterbodies or drains.
- Methods for Cleaning Up: Avoid generation of dust. Remove all sources of ignition. Sweep or scoop up into closed containers for disposal.

## **7. HANDLING AND STORAGE**

- Max. Storage Temperature: 190°F (88°C)
- Handling: Ensure appropriate exhaust and ventilation at machinery and at places where dust can be generated. Avoid dust formation, and accumulation of static charges. Prohibit sources of spark and ignition, such as smoking. Processing of this product under high temperatures will cause hazardous emissions of vapors, carbon monoxide or carbon dioxide.
- Storage: If this material is stored under ambient temperature conditions, it is not hazardous. However, extensive storing at higher than the maximum temperature will emit vapors, carbon monoxide or carbon dioxide.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Exposure Limits: Not applicable
- Ventilation Measures: Provide good ventilation and/or an exhaust system in the work area.
- Respiratory Protection: None required under normal conditions.
- Hand Protection: Canvas or cotton gloves.
- Eye Protection: Safety glasses with side shields (ANSI Z87.1 equivalent).
- Skin & Body Protection: Wear suitable protective clothing and boots.
- Other Protective Measures: Avoid contact of molten material with skin. Do not inhale dust particles or vapors. Keep away from sources of ignition. Wash hands before breaks and after work.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

- Physical State: Solid sheets
- Color: Clear to opaque
- Odor: Not applicable
- pH: Not applicable
- Melting Point: 300°F (150°C)
- Boiling Point: Not available
- Decomposition Temperature: Not available
- Flash Point: 716°F (380°C)



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Auto-ignition Temperature: 923°F (495°C)  
Explosion Limits: Not applicable  
Evaporation Rate: Not applicable  
Vapor Pressure: Not applicable  
Vapor Density: Not applicable  
Relative Density: 1.15 – 1.18  
Solubility: Insoluble

## **10. STABILITY AND REACTIVITY**

Stability: Stable. Hazardous polymerization does not occur.

Conditions to Avoid: Protect from excessive heat. Keep away from sources of ignition and heat. Avoid dust formation.

Materials to Avoid: None under normal conditions of use.

Hazardous Decomposition Products: Thermal decomposition or combustion may emit vapors, carbon monoxide, or carbon dioxide.

## **11. TOXICOLOGICAL INFORMATION**

This product should not be harmful under normal conditions of use.

Inhalation: Unlikely to be harmful by inhalation under ambient temperature. Inhalation of vapors from heated product can cause nausea, headache, dizziness as well as irritation of lungs, nose, and throat.

Skin Contact: Possible skin irritation. Contact with molten material can result in burns.

Ingestion: Unlikely to be harmful by ingestion under ambient temperature.

Eye Contact: Vapors from heated product can irritate the eyes.

Carcinogenicity: Non-carcinogenic

## **12. ECOLOGICAL INFORMATION**

This product is a solid, inert product with low volatility, and is essentially insoluble in water.

Ecotoxicity: This product should have low toxicity to aquatic and terrestrial organisms.

Mobility: Due to the solid nature of this product, it should have low mobility in soil.

Persistence & Degradability: This product is non-biodegradable.

Bioaccumulation: This solid product has a low potential for bioaccumulation.

Effect in Sewage Plants: May be separated mechanically.



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## **13. DISPOSAL CONSIDERATIONS**

Waste disposal should be in accordance with all federal, state and local environmental laws and regulations.

## **14. TRANSPORT INFORMATION**

Not subject to national and international regulations on the transport of dangerous goods.

## **15. REGULATORY INFORMATION**

OSHA Hazard Communication: Non-hazardous

Toxic Substances Control Act: Listed

CERCLA Hazardous  
Substances (40 CFR 302): None

SARA Section 311/312: Non-hazardous

SARA Section 302 Extremely  
Hazardous Substances  
(40 CFR 355, Appendix A): None

SARA Section 313 Toxic  
Chemicals (40 CFR 372.65): None

RCRA Hazardous Wastes  
(40 CFR 261): When this product becomes a waste, it is identified as a solid but NOT hazardous waste under RCRA criteria (40 CFR Part 261).

Canadian WHMIS: None

## **16. OTHER INFORMATION**

HMIS Rating: Health = 1 Flammability = 1 Physical Hazard = 0

