

Safety Data Sheet



Optix Acrylic Sheet

1. Product details

Usage:	Various fabrication applications
Chemical characterization:	>90% Polymethyl methacrylate (PMMA) [CAS#9011-14-7]
Other names:	Formerly known as LuciteLux Cell Cast Acrylic Sheet

2. Hazards identification

This material is classified as not hazardous under OSHA regulations. Low toxicity under normal conditions of handling and use. Combustion or thermal decomposition will evolve toxic, irritant and flammable vapors. Care should be taken during thermoforming to ensure that the product is not exposed to temperatures exceeding 392°F (200°C). Certain machining operations (e.g. laser cutting) can give rise to toxic and corrosive fumes. Adequate ventilation MUST be used.

3. First aid measures

Inhalation:	Dust or fumes from fabrication operations may cause irritation. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin contact:	If molten material contacts skin, cool rapidly with cold water and obtain medical attention for thermal burn.
Eye contact:	Dust or fumes from fabrication operations may cause irritation. 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. Do not induce vomiting. Rinse mouth.

4. Fire – fighting measures

Suitable extinguishing measures:	Water spray, foam, dry powder, or CO ₂ .
Specific fire hazards:	Combustion will evolve toxic, irritant and flammable vapors.
Special protective equipment & precaution for fire fighters:	Wear a self-contained breathing apparatus and full protective gear.

5. Accidental release measures

Personal precaution:	Provide adequate ventilation. Wear personal protective equipment. Do not breathe dust.
Environmental precaution:	Do not allow to enter into soil, waterbodies, or drains.
Methods for cleaning up:	Offcuts, swarf, or dust should be collected and disposed of safely.

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6. Handling and storage

Max. storage temperature: <104°F (<40°C)

Handling: These sheets are heavy and unwieldy. They should be handled with care, particularly in windy locations or outdoors. If broken or chipped the resultant edges can be sharp and cause cuts to skin and eyes. Take precautionary measures against static discharges. All polymers degrade to some extent at their processing temperature, an effect which increases with increasing temperature. Under normal conditions where thermoforming temperatures will not exceed 392°F (200°C) thermal decomposition products will include methyl methacrylate. Local exhaust ventilation and/or respiratory protective equipment should be used. Certain machining operations (e.g. laser cutting) can give rise to toxic and corrosive fumes. Adequate ventilation MUST be used. 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.

Storage: Keep away from heat. Store vertically on A-frames.

Incompatible materials: Most organic solvents, acetone, chlorinated hydrocarbons.

7. Exposure control

Exposure limits: Methyl methacrylate

OSHA		ACGIH	
PEL	STEL	TLV	STEL
100 ppm	None	50 ppm	100 ppm

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: Do not eat, drink, or smoke at the workplace. Provide adequate ventilation, including appropriate local extraction if dusts, fumes, or vapors are likely to be evolved. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required. Local extraction close to the cutting head must be used when laser cutting. Where suitable engineering controls are not fitted or are inadequate, wear suitable protective equipment.

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8. Physical and chemical properties

Physical state:	Solid sheets
Color:	Clear or colored
Odor:	Not applicable
pH:	Not applicable
Melting point:	Not available
Boiling point:	Not available
Decomposition temperature:	Not available
Flash point:	Not available
Auto-ignition temperature:	Not available
Explosion limits:	Not available
Evaporation rate:	Not applicable
Vapor pressure:	Not applicable
Vapor density:	Not applicable
Relative density:	1.19
Solubility:	Insoluble

9. 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.

10. Toxicological information

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

Inhalation:	Unlikely to be harmful by inhalation under ambient temperature. At high temperature, products of thermal decomposition can be irritating to the respiratory system.
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Skin contact:	No evidence of irritant effects from normal handling and use. Sharp edges may cause cuts.
Ingestion:	Unlikely to be harmful by ingestion under ambient temperature.
Eye contact:	Vapors from heated product can irritate eyes. Sharp off-cuts may cause eye damage.
Carcinogenicity:	Non-carcinogenic

11. Ecological information

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.

12. Disposal considerations

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

13. Transport information

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

14. Regulatory information

Toxic Substances Control Act:	Listed
CERCLA Hazardous Substances (40 CFR 302):	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).
EU Regulations:	This product is an Article and as such Article 31 (Requirements for Safety Data Sheets) of Regulation (EC) #1907/2006 does not apply.

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California Proposition 65:

WARNING: This product can expose you to chemicals including Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 Safe Harbor Level(s):
Maximum Allowable Dose Level (MADL) for Bisphenol A = 3 ug/day (dermal exposure from solid material)

15. Other information

SDS Prepared by: A&C Plastics

The information presented herein is believed to be factual and reliable. It is offered in good faith, but without guarantee, since conditions and methods for the use of our products are beyond our control. We recommend that the prospective user determine the suitability of our products and these suggestions before adopting them on a commercial scale.