

## SAFETY DATA SHEET

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

Product Name	LUCITELUX® LIGHT GUIDE PANEL
Identified use(s) Uses advised against	Edge lit illumination signage and displays. This material is not for human implantation.
Manufacturer	LUCITE INTERNATIONAL, Inc., 7275 Goodlett Farms Parkway, Cordova, TN 38016-4909 Phone: 1-800-4-LUCITE msdsinfo@lucite.com
Emergency Phone No.	1-800-424-9300 (Transport Emergency) 1-877-886-2143 (Medical Emergency)

### 2. HAZARDS IDENTIFICATION

Hazard classification	This product does not meet the criteria for classification as hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Other hazards	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 eg laser cutting, can give rise to toxic and corrosive fumes. Adequate ventilation MUST be used.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance identity	%W/W	CAS No.
Poly(Methyl methacrylate) or Poly(Methyl methacrylate/Butyl acrylate) or Poly(Methyl methacrylate/Methyl acrylate)	>88	9011-14-7 or 25852-37-3 or 9011-87-4
Methyl methacrylate	<2	80-62-6

### 4. FIRST AID MEASURES

Dust or fumes from fabrication operations may cause irritation.

#### Description of first aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Skin Contact	Unlikely to cause skin irritation. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	Low oral toxicity. Do not induce vomiting. Rinse mouth.

#### Most important symptoms and effects, both acute and delayed

Not applicable.

#### Indication of any immediate medical attention and special treatment needed

None necessary.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Water spray, foam, dry powder or CO <sub>2</sub> .
Unsuitable Extinguishing Media	None.
Special hazards arising from the substance or mixture	Combustion will evolve toxic, irritant and flammable vapors.
Special protective equipment and precautions for fire fighters	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

## 6. ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up	Offcuts, swarf or dust should be collected and disposed of in a safe way.
Other advice	See Section: 8, 13

## 7. HANDLING AND STORAGE

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.
Process Hazards	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 predominantly Methyl methacrylate. Local exhaust ventilation and/or respiratory protective equipment should be used. Certain machining operations eg laser cutting, can give rise to toxic and corrosive fumes. Adequate ventilation MUST be used.
STORAGE	Keep away from heat. Store vertically on A-frames.
Storage temperature (°C):	<40°C
Storage life	Indefinite under specified storage conditions.
Incompatible materials:	Most organic solvents , Acetone , chlorinated hydrocarbons .

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

The following values apply to substances which may be evolved during thermal processing.

Substance	CAS No.	OSHA PEL TWA	ACGIH TWA	ACGIH STEL	Company Std. TWA	Company Std. STEL
Methyl methacrylate	80-62-6	100 ppm 410 mg/m <sup>3</sup>	50 ppm (205 mg/m <sup>3</sup> )	100 ppm (410 mg/m <sup>3</sup> ) (SEN;A4)	50 ppm	100 ppm
n-Butyl acrylate	141-32-2		2 ppm (10 mg/m <sup>3</sup> ) (SEN;A4)			
Methyl acrylate	96-33-3	10 ppm 35 mg/m <sup>3</sup>	2 ppm (Skin;SEN;A4)			

Appropriate engineering controls	Do not eat, drink or smoke at the work place. 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. When thermoforming local exhaust ventilation should be used. Where suitable engineering controls are not fitted or are inadequate, wear suitable protective equipment. The following information is given as general guidance.
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### Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection



Wear eye/face protection. Safety spectacles/goggles/full face shield.

Skin protection



Wear suitable gloves. Sharp edges may cause cuts.

Respiratory protection



NORMAL HANDLING : Not normally required.

PROCESSING: Dust: A suitable dust mask or dust respirator with filter type P may be appropriate. (EN141/EN143).

Vapor: If high levels above the Occupational Exposure Limit are likely a suitable mask with filter type A may be appropriate (EN141/EN143).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Sheet
Color.	Clear.
Odor	Odorless.
Specific Gravity	1.19
Solubility (Water)	Insoluble.
Solubility (Other)	Soluble in most organic solvents, acetone and chlorinated hydrocarbons

## 10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions.
Hazardous Reactions	None known.
Conditions to avoid	Keep away from heat.
Materials to avoid	Most organic solvents , Acetone , chlorinated hydrocarbons .
Hazardous decomposition product(s)	Methyl methacrylate, Butyl acrylate, Carbon dioxide, Carbon monoxide, traces of Acrolein.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Ingestion	Unlikely to be hazardous if swallowed.
Inhalation	Unlikely route of exposure.
Skin Contact	No evidence of irritant effects from normal handling and use. Sharp edges may cause cuts.
Eye Contact	Swarf or dust may cause irritation. Sharp off-cuts may cause eye damage.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	The product is predicted to have low toxicity to aquatic organisms.
Persistence and degradability	The product is non-biodegradable in soil. There is no evidence of degradation in soil and water.
Bioaccumulative potential	The product has low potential for bioaccumulation.
Mobility	The product has low mobility in soil.

## 13. DISPOSAL CONSIDERATIONS

The waste is considered to be non hazardous. Large quantities of waste may be recoverable. Contact supplier for specialised advice.

Disposal methods	Disposal should be in accordance with local, state or national legislation. May be disposed of by landfill in accordance with local regulations. Incineration may be used to recover energy value.
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## 14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)	Not Classified as Dangerous for Transport.
UN No.	Not applicable
Proper Shipping Name	Not applicable.
Class	Not applicable.
Packing group	Not applicable
Environmental hazards	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

## 15. REGULATORY INFORMATION

### US Federal Regulations

Superfund reportable discharge	None
SARA 302 - Extremely Hazardous Substances	None
SARA 313 - Toxic Chemicals	Regulated as a Toxic Chemical under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372: Less than 2% Methyl methacrylate.

### US State Regulations

California	SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM None known. SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER None known.
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### Canadian Regulations

WHMIS Classification	Not classified.
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### EU regulations

Safety, health and environmental regulations	This product is an Article and as such Article 31 (Requirements for Safety Data Sheets) of Regulation (EC) No 1907/2006 does not apply.
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## 16. OTHER INFORMATION

Date of preparation: 30 -July- 2015

### LEGEND

Note: Not all of the following are necessarily contained in this Safety Data Sheet:

LTEL: Long Term Exposure Limit

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

PEL: Permissible Exposure Levels

OSHA: Occupational Safety and Health Administration

SARA: Superfund Amendments and Reauthorisation Act

WHMIS: Worker Hazardous Materials Information System

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For other technical information, contact the address in Section 1.

Lucite International does not recommend this product for use in applications involving long-term contact with body tissues.

It is the responsibility of the end-product manufacturer to identify all market and use-specific regulations and to ensure compliance with these regulations.

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