## Anti Fog Coating

*Improves Light Transmission and Prevents Plant Disease*

Polygal Polycarbonate sheets can be Anti-Fog coated upon request. This factory-applied, silicone-based coating combines long lasting anti-fogging properties with excellent adhesion and great stability under exposure to environmental chemicals.

Anti-Fog coated Polycarbonate sheets show improved abrasion resistance, resulting in very good rub-off and wash-off resistance.

When used in greenhouse applications, Anti-Fog treated Polygal Polycarbonate sheets increase light transmission and protect against plant diseases by eliminating condensed water drip.

# Polygal PCSS Material Safety Data Sheet

*Date of issue: November 27, 2000*

### 1. Identification of the substance, preparation and manufacturer:

Hollow Profile Sheet made of Polycarbonate

Cas # :

Polygal Plastics Industries Ltd.

Ramat Hashofet 19238 ISRAEL

Phone: 972-4-959-6222, Fax: 972-4-959-6296,

Email: sales@polygal.co.il

Website: www.polygal.com

### 2. Composition/Information on Ingredients:

Polycarbonate based on Bisphenol A

### 3. Hazard Identifications:

Emergency Overview:

Sheets have almost no odor. Can burn in fire creating dense toxic smoke. If heated to melt-point the molten plastic can cause severe thermal burns. Secondary operations, such as grinding, sanding or sawing can produce dust, which may create a respiratory or explosion hazard.

Potential Health Effects

**EYE**: Product may cause irritation or injury due to mechanical action.
**SKIN**: Sheets are not likely to cause skin irritation. If heated to melt-point the molten plastic can cause severe thermal burns.
**INGESTION**: Not acutely toxic.
**INHALATION**: Unlikely due to physical form.
**CHRONIC/CARCINOGENICITY**: Not listed
**MEDICAL RESTRICTIONS: There are no known human health effects aggravated by exposure to this product.**

## 4. First-Aid Measures:

**EMERGENCY AND FIRST AID INFORMATION:**
**EYES**: Remove contact lenses at once. Immediately flush eyes well with copious quantifies of water or normal saline for at least 20-30 minutes. If irritation persists, seek medical attention.
**SKIN**: Wash skin thoroughly with soap and water. Seek medical attention if rash or burn occurs.
**INGESTION**: Not probable. If large amount is swallowed, seek medical attention.
**INHALATION**: Not likely due to physical form.
**BURNS**: Burns by molten material must receive medical attention. Do not try to remove melted PC from skin.

## 5. Fire-Fighting Measures:

Extinguishing materials: water spray is recommended due to its cooling capacity. Other materials such as extinguishing powder, CO2 , Foam, dry powder are also possible.
Firemen must wear self-contained breathing apparatus.
FLASH POINT: Not applicable
AUTO IGNITION TEMPERATURE: 630°C (1166°F) estimated
LOWER EXPOSURE LIMIT(%): Not established
UPPER EXPOSURE LIMIT (%): Not established
**HAZARDOUS COMBUSTION BY-PRODUCTS:** Hazardous combustion by-products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide and hydrocarbon fragments.

## 6. Accidental Release Measures:

Sweep or gather up material mechanically.

## 7. Handling and Storage:

Ensure adequate ventilation or exhaust ventilation in the working area. Dust must be removed by effective exhaust ventilation.
Avoid contact or proximity with PVC plasticizers (phtalates).

Store in a dry place away from moisture, excessive heat and sources of combustion.

### 8. Exposure Controls / Personal Protection:

No specific exposure related hazards are known.

Wear protective gloves while handling sheets.

### 9. Physical and Chemical Properties:

Form: Hollow Plastic Sheet

Color:

Colorless or pigmented:

Clear, Opal Ice, Bronze, Blue,

Green, Grey and other Odor: Odorless Softening Point: 150-160°C (300-320°F)

Density: Material: 1200 kg/m? at 20°C

Sheet: 125-250 kg/m3 Vapor Pressure: Not Applicable

Viscosity: Not Applicable

Solubility in Water: Insoluble

pH Value: Not Applicable

Flash Ignition Temperature: > 450°C (842°F)

Self Ignition Temperature: > 450°C (842°F)

Explosive Limit: Not Applicable

### 10. Stability and Reactivity:

Thermal decomposition: Decomposition begins at 380°C (716°F).

Hazardous decomposition products: in cases of smoldering and incomplete combustion, toxic fumes mainly consisting of CO and CO2 may develop as well as traces of Aliphatic and Aromatic Hydrocarbons, Aldehydes, Acids, Phenol and Phenol-derivatives.

Hazardous reactions: No hazardous reactions observed.

### 11. Toxicological Information:

**EYE**: Product not considered as a primary eye irritant.

**SKIN**: Product not considered as a primary skin irritant.

Dermal LD50 (rabbit) >2g/kg estimated.

**ACUTE ORAL**: Oral LD50 (rat) >5g/kg estimated

### 12. Ecological Information

WATER: Water pollution class (WGK): 0 - not generally hazardous to water.

GENERAL: Not expected to present any significant ecological problems.

## 13. Disposal Considerations:

RECYCLE AND DISCHARGE: The product is suitable for mechanical recycling. After appropriate treatment it can be remelted and processed into new molded articles.

Mechanical recycling is possible if the material has been selectively retrieved and carefully segregated according to type.

May be discharged or incinerated together with household refuse if local official regulations are observed.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Sweep or gather up material and place in proper container for disposal or recovery.

## 14. Transport Information

DOT HAZARD CLASS: Not regulated

PROPER SHIPPING NAME: Not regulated

IDENTIFICATION NUMBER: Not listed

OTHER INFORMATION: Not Dangerous Cargo. Keep Dry.

## 15. Regulatory Information

No labeling is required in accordance with the EEC directives.

In connection with dusts formed in consequence of mechanical treatment, e.g. grinding, the appropriate regulation/maximal values for fine dusts must be observed:

MAX Value (fine dust): 6 mg/m3

This product does not contain reportable quantities of substances subject to supplier notification.

## 16. Other Information

The safety data sheet is valid for Polycarbonate (bisphenol-A-carbonate).

The trade names of the base resin are Makrolon of Bayer AG Germany and Lexan of General Electric Plastics B.V. Holland.

Pigments and additives used to enhance specific properties are encapsulated in the polymer resin matrix, and/or on the sheet surface.