

# MATERIAL SAFETY DATA SHEET (MSDS)



## SECTION 1: Identification of the substance and of the company/ undertaking

### 1.1 Product identifier:

Trade name: **MONOGAL/PLAZCARB (EMBOSSED: PINSPOT, AQUA, GEOMETRIC, LIZARD, CRACKED ICE, K-12, K-10, G-TEC, NON REFLECT / F/ IR-SOLAR / LED), TOP PC, TITAN SKY, THERMOGAL, THERMOGAL SUPER, THERMOCLEAR, SELECTOGAL, TOPGAL ROOFING SYSTEM, DOUBLE and TRIPLE LAYERED SHEETS, CURROGAL, PC CONNECTION PROFILES**

Product name: Solid and Multiwall Polycarbonate Extruded Sheets and profiles

Material Name: Polycarbonate Polymer

CAS number: 25307-45-0

Material Synonyms: PC

NFPA Ratings: Health – 0, Fire = 1, Reactivity = 0

### 1.2 Relevant identified uses applications of the product:

Wide range of flat, curved and thermoformed glazing, exterior and interior applications and others.

### 1.3 Details of the supplier:

Supplier: Plazit-Polygal Group

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## SECTION 2: Composition/Information on Ingredients

**2.1 Chemical Name:** Polycarbonate of Bisphenol A

### 2.2 Remarks:

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

## SECTION 3: Hazards identification

### 3.1 Product Overview:

**Color:** clear

**Physical state:** solid

**Form:** sheets

**Odor:** odourless

**Not labelled as hazardous.**

**CAUTION! PROCESSING MAY RELEASE VAPORS AND/OR FUMESS WHICH CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION**

### 3.2 Potential Health Effects:

**Eyes:** 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.

### 3.3 Remarks:

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.

## SECTION 4: First-aid measures

Normal handling of the material is not expected to cause accidents.

### 4.1 Description of first aid measures:

**Inhalation:** Not likely due to the physical form. If inhaled, remove to fresh air.

**Skin:** Wash skin thoroughly with soap and water. Seek medical attention if rash or burn occurs.

**Eyes:** Remove contact lenses at once. Immediately flush eyes well with copious quantities of water or normal saline for at least 20-30 minutes. If irritation persists, seek medical attention.

**Ingestion:** Not probable. If large amount is swallowed, seek medical attention.

**Burns:** Burns by molten material must receive medical attention. Do not try to remove melted PC from skin.

### 4.2 Most important symptoms

**Dust:** Skin irritation, eye irritations and redness.

### 4.3 Indication of any immediate medical attention and special treatment needed: No

## SECTION 5: Fire-fighting measures

This material burns with difficulty and generally requires a continuous external flame source to sustain combustion. Without flashover fire conditions it will tend to extinguish it.

**5.1 Extinguishing media:** Water spray is recommended due to its cooling capacity. Other materials such as extinguishing powder, foam CO<sub>2</sub>, dry powder are also possible.

Firemen must wear self-contained breathing apparatus.

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## 5.2 Extinguishing Media to Avoid:

No information currently available.

## 5.3 Special Fire Fighting Procedures:

Personnel without suitable respiratory apparatus and protective clothing should leave the affected area to prevent exposure to toxic or combustible gases.

## 5.4 Special Protective Equipment for Firefighters:

Positive-pressure self-contained breathing apparatus, protective clothing, gas mask approved for acid vapors.

## 5.5 Fire and Explosion Hazards:

Hazardous combustion by-products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide and hydrocarbon fragments.

Heated material can form flammable vapors with air.

## SECTION 6: Accidental Release Measures

Sweep or gather up material mechanically. No special precautions and no personal protective equipment needed.

## SECTION 7: Handling and Storage

### 7.1 Handling:

No explosion hazard.

Ensure standard industrial hygiene: provide adequate ventilation or exhaust ventilation in the working area. Dust must be removed by effective exhaust ventilation.

Avoid contact or proximity with PVC plasticizers (phthalates).

### 7.2 Storage:

This material is not hazardous under normal storage conditions.

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

## SECTION 8: Exposure Controls / Personal Protection

No specific exposure related hazards are known.

### 8.1 Exposure limits:

Wear protective gloves while handling sheets.

If dust is produced from reworking (sawing, grinding, etc) an approved respirator or mask should be used for protection from dust.

### 8.2 Industrial Hygiene/Ventilation Measures

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines, especially during cutting, grinding and high heat operations.

### 8.3 Respiratory protection

No exposure limit has been established for this product.

### 8.4 Hand protection

Wear heat resistant gloves when handling molten material.

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### 8.5 Eye protection

Wear safety glasses with side-shields when cutting the sheets.

### 8.6 Skin and body protection

No special skin protection requirements during normal handling and use.

## SECTION 9: Physical and Chemical Properties

**Color:** Colorless or pigmented

**Form:** Solid and multiwall plastic sheets

**Odor:** Odourless

**pH:** Not applicable

**Density:** (20°C) 1.2 g/cm<sup>3</sup>

**Vapor pressure:** Not applicable

**Viscosity:** Not applicable

**Softening point:** 150-160°C (300-320°F)

**Flash point:** Not applicable

**Autoignition temperature:** 630°C (1166°F) estimated

**Flash ignition temperature:** > 450°C (842°F)

**Self ignition temperature:** > 450°C (842°F)

**Decomposition temperature:** about 280°C

**Solubility in water:** Insoluble

**Explosive Limit:** Not Applicable

**Lower / Upper exposure limit (%):** Not established

## SECTION 10: Stability and Reactivity

### 10.1 Stability:

The product is stable under normal handling and storage conditions.

### 10.2 Hazardous reactions:

No hazardous reactions observed.

Not reactive under recommended conditions of handling, storage, processing and use.

### 10.3 Materials to avoid:

None under normal conditions of use.

### 10.4 Conditions / hazards to avoid:

Avoid flames, welding arcs, potential ignition sources, or other high temperature sources (>250 C) which induce thermal decomposition.

### 10.5 Hazardous / thermal decomposition products:

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

In cases of smoldering and incomplete combustion, toxic fumes mainly consisting of CO and CO<sub>2</sub> may develop as well as traces of Aliphatic and Aromatic Hydrocarbons, Aldehydes, Acids, Phenol and Phenol-derivatives.

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## **SECTION 11: Toxicological Information**

### **11.1 Acute toxicity:**

Practically nontoxic. Oral LD50 (rat) >5g/kg estimated .

### **11.2 Genotoxicity:**

No genetic changes were observed in laboratory tests.

### **11.3 Eyes / Skin contact:**

Product not considered as a primary eyes / skin irritant. Dermal LD50 (rabbit) >2g/kg estimated.

### **11.4 Other information:**

No known toxicological effects with normal use.

No additional toxicity information currently available.

## **SECTION 12: Ecological Information**

All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this safety data.

**Water:** Water pollution class (WGK): 0 – not generally hazardous to water.

**General:** Not expected to present any significant ecological problems.

## **SECTION 13: Disposal Considerations**

### **13.1 Recycle and discharge:**

The product is suitable for mechanical recycling. After appropriate treatment it can be remelted and processed into new articles. May be disposed of or incinerated together with household refuse if local official regulations are observed.

### **13.2 Waste disposal:**

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

## **SECTION 14: Transport Information**

This product is not subject to transport regulations.

**14.1 Department of Transportation (DOT) Hazard Class:** not regulated

**14.2 Other information:** Not Dangerous Cargo. Keep dry.

Proper shipping name: Not regulated

Identification number: Not listed

## **SECTION 15: Regulatory Information**

**REACH:** This product is classified as an "article" and does not require registration or notification to the European Chemical Agency. This product does not contain reportable quantities of substances subject to supplier notification.

### **RoHS:**

This product complies with RoHS - it does not intentionally contain banned chemicals.

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**Labeling:** No special labeling is required in accordance with the EEC directives.

**Dust:** Dust resulting from mechanical re-working (e.g. cutting grinding, etc) should meet appropriate regulations regarding maximum values for fine dusts.

**NATIONAL REGULATORY INFORMATION:**

We have not analyzed the products covered by this MSDS, nor the raw materials used in their manufacture, for the presence of items on various national hazardous substances lists. However, to the best of our knowledge, no such substances are present at reportable concentrations, except as specifically listed.

**SECTION 16: Other Information**

The safety data sheet is valid for Polycarbonate products.

Additional information on this product may be obtained by calling your Plazit-Polygal Sales or Customer Service contact.

**MSDS Prepared By:** R&D Department Plazit-Polygal Group

**MSDS Original Date of Preparation:** May 19, 2020

**MSDS Revision Date:**

DISCLAIMER: The data in this advertisement are provided in good faith and constitute general information without commitment and no warranty is given or implied. Our plastics products are a combustible thermoplastic that complies with various international standards, as customary in each country. Avoid exposure to excessive heat or aromatic cleaning solvent. Normal fire precautions should be taken to protect against combustion.

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