# Material Safety Data Sheet

## 1. PRODUCT AND COMPANY IDENTIFICATION

**TRANSPARENT PROTECTION SYSTEMS, INC.**
6643 42nd Terrace, North
West Palm Beach, FL 33407

**PHONE NUMBERS:**
PRODUCT INFORMATION: Tel: 561-840-9499 Fax: 561-840-9312
TRANSPORT EMERGENCY: 800-424-9300 (CHEMTREC) 24 HOUR

**PRODUCT NAME:** POLYTUFF GP Polycarbonate Sheet
**PRODUCT CODE:** NON-CODED
**CHEMICAL FAMILY:** SYNTHETIC THERMOPLASTIC POLYMER
**CHEMICAL NAME:** POLYCARBONATE
**PRODUCT USE:** May be used to produce fabricated or molded products or as component parts used in architectural or industrial products.

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
<th>Exposure Limits</th>
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</table>

This product does not contain any reportable hazardous materials as defined using the criteria of the Federal OSHA Hazard Communications Standard 29 CFR 1910.1200.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**POTENTIAL HEALTH EFFECTS:**

**ROUTE(S) OF ENTRY:** Inhalation; Skin Contact; Eye Contact

**HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:**

**ACUTE EFFECTS OF EXPOSURE:** Material is a non-reactive solid. Mechanical irritation (i.e. abrasion) to the eyes may occur due to exposure to dust; eyes may become red and scratchy and may tear.

**NOTE:** Fumes generated during the processing or decomposition of this material may irritate the eyes, skin or respiratory tract. At recommended processing conditions, the primary fumes generated are water, carbon dioxide (CO2), diphenyl carbonate, and monochlorobenzene.

Product: POLYTUFF GP  
Continued on next page
### 3. COMPOSITION/INFORMATION ON INGREDIENTS (CONTINUED)

**CHRONIC EFFECTS OF EXPOSURE:** None known  
**CARCINOGENICITY**  
NTP: Not listed as a carcinogen  
IARC: Not listed as a carcinogen  
OSHA: Not listed as a carcinogen  

**MEDICAL CONDITIONS**  
**AGGRAVATED BY EXPOSURE:** None known  
**EXPOSURE LIMITS:** For product dust, the OSHA-PEL for nuisance dust of 15 mg/m³ total dust, 5 mg/m³ respirable dust is recommended. In addition, the ACGIH-TLV for Particulates Not Otherwise Classified (PNOC) of 10 mg/m³ is recommended. Observe a more stringent limit for product fines if applicable. Refer to section 2 for any other applicable exposure limits. At temperatures above decomposition (716 °F (380 °C)), phenol and other chemicals listed in the hazardous decomposition products can be generated. (See section 10) Care should be taken to observe the exposure limits and minimize exposure to these components if the product is heated to the decomposition temperature. The ACGIH-TLV and OSHA-PEL for phenol is 5 ppm-TWA.

### 4. FIRST AID MEASURES

**INGESTION:** If material is ingested, do not induce vomiting. Seek medical attention if symptoms develop.  
**EYES:** Contact with powder or dust may cause mechanical irritation. Immediately flush eyes with water, seek medical attention if irritation persists.  
**SKIN:** Wash with soap and water.  
**INHALATION:** Sheet material is not considered a hazard.

### 5. FIRE FIGHTING MEASURES

**FIRE FIGHTING PROCEDURES:** Full emergency equipment with self-contained breathing apparatus must be worn by firefighters.  
**AUTO-IGNITION TEMPERATURE:** Above 842 °F (450 °C) ASTM D-1929B  
**EXTINGUISHING MEDIA :** Water; Carbon Dioxide; Dry Chemical; Foam  
**EXPLOSION HAZARDS:** Fines/dust from secondary operations (sawing, routing, grinding, etc.) may form an explosive mixture in air.

### 6. ACCIDENTAL RELEASE MEASURES

**SPILL OR LEAK PROCEDURES:** Sheet goods are not considered to be prone to spills or leaks. Clean up dust or fines generated by secondary operations (sawing, routing, grinding, etc.) by vacuuming or sweeping to prevent falls.

Product: PolyTuff GP  
Approval date: 11/09/2008

Continued on next page
7. **HANDLING AND STORAGE**

**STORAGE:** Store in a cool, dry place. Avoid excessive heat and humidity.

**SHELF LIFE:** Not established

**SPECIAL SENSITIVITY:** Moisture

8. **PERSONAL PROTECTION**

**EYE PROTECTION REQUIREMENTS:** Safety glasses are recommended as a good industrial hygiene and safety practice.

**SKIN PROTECTION REQUIREMENTS:** None required.

**RESPIRATOR REQUIREMENTS:** NIOSH/MSHA-approved dust respirator recommended if the airborne dust concentration is near or exceeds the nuisance dust exposure limits (15 mg/m³).

9. **PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE:** Solid

**COLOR:** Tint

**ODOR:** Slight

**pH:** Not applicable

**BOILING POINT:** Not applicable

**MELTING/FREEZING POINT:** 428-446 F (220-230 C)

**SOFTENING POINT:** 302-320 F (150-160 C)

**SOLUBILITY IN WATER:** Insoluble

**SPECIFIC GRAVITY:** Approx. 1.2

**% VOLATILE BY VOLUME:** Negligible

**EVAPORATION RATE:** Not applicable

**VAPOR PRESSURE:** Not applicable

**VAPOR DENSITY:** Not applicable

10. **STABILITY AND REACTIVITY**

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBILITIES:** None known

**INSTABILITY CONDITIONS:** None known

**DECOMPOSITION TEMPERATURE:** Begins at 716 F (380 C)

**DECOMPOSITION PRODUCTS:** By fire or thermal decomposition: Carbon monoxide (CO), carbon dioxide (CO₂), Bisphenol A, diphenyl carbonate, phenol and phenol derivatives. Traces of aliphatic and aromatic hydrocarbons, aldehydes and acids may also be formed.

Product: PolyTuff GP

Continued on next page
11. TOXICOLOGICAL INFORMATION

TOXICITY DATA FOR: Polycarbonate

ACUTE TOXICITY

OTHER ACUTE EFFECTS: Gases and fumes evolved during thermal decomposition of similar products have caused respiratory irritation in mice.*

* Toxicologic evaluation of thermoplastic resins at and above processing temperature, G.K. Sangha, M. Matijak and Y. Alarie, Department of Industrial Environmental Health Sciences, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, PA, 15216, AIHA Journal (42), July 1981.

12. ECOLOGICAL INFORMATION

NO ECOLOGICAL INFORMATION AVAILABLE

13. DISPOSAL INFORMATION

WASTE DISPOSAL METHOD: Material may be incinerated or landfilled in compliance with federal, state and local environmental control regulations. Recycling of off-cuts, scrap and waste is encouraged.

14. TRANSPORTATION INFORMATION

TECHNICAL SHIPPING NAME: Polycarbonate Sheet

FREIGHT CLASS BULK: Plastic Sheets

REGULATORY STATUS: Not Regulated

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA): This product is in compliance with TSCA inventory requirements for commercial purposes.

SECTION 313 SUPPLIER NOTIFICATION (SARA TITLE III-TOXIC CHEMICALS LIST): This product contains no known toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Right-To-Know Act of 1986 and 40 CFR372.

16. OTHER INFORMATION

PREPARED BY: J. GUITERREZ
APPROVED BY: C. M. HAMPTON
APPROVAL DATE: 11/09/08
SUPERCEDES: None
MSDS NUMBER: 011908

Product: PolyTuff GP

MSDS Page 4 Approval date: 11/09/2008

Continued on next page
16. OTHER INFORMATION (CONTINUED)

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