

**Composite Technologies Co., LLC.**

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**MATERIAL SAFETY DATA SHEET****SECTION I: MATERIAL IDENTIFICATION**

Product Name: X-PRO Resins	Product Description: Recycled Content, Polypropylene, General Purpose Black
Product Use: Injection Molded Parts	Chemical Family: Olefin Polymers and/or Copolymers
Synonyms: Plastic	Chemical Formula: Mixture

**SECTION II: COMPOSITION / INFORMATION ON INGREDIENTS**

The breakdown of components listed below is for informational purposes only. The finished pelletized product is composed of a dispersion of the non-polymer components encapsulated in polypropylene. Thus, the individual health hazard associated with each component in raw form has been greatly reduced. See section VI and VII for additional information.

Chemical Name/Description	Concentration (%)	NIOSH / OSHA PEL	ACGIH TLV	LD50 or LC50, species and route
1. Polypropylene CAS# 9003-07-0	50 - 100	Not Established	Not Established	Inert
2. Polypropylene Copolymer CAS# 9010-79-1	0 - 40	Not Established	Not Established	Inert
3. Calcium Carbonate CAS# 471-34-1	0-10	TWA 5 mg/m <sup>3</sup> (resp)	TWA 10 mg/m <sup>3</sup> (resp)	NE, lung irritant as airborne dust
4. Pigment CAS# 1333-86-4	0 - 2	TWA 5 mg/m <sup>3</sup> (resp)	TWA 3 mg/m <sup>3</sup> (resp)	NE, lung irritant as airborne dust
5. Additives and Polymer Stabilizers CAS# Multiple	0 - 2	Not Established	Not Established	Not Applicable

**SECTION III: PHYSICAL DATA**

Physical State: Solid	Appearance and Odor: Spherical black pellets with mild, non-specific odor.	
Specific Gravity, (H <sub>2</sub> O = 1): 1.05	Melting Point: 161°C (322°F)	Boiling Point: Not Applicable
Vapor Pressure at 23°C: Negligible	Percent Volatile by Volume: Negligible	Vapor Density, (air = 1): Not Applicable
Evaporation Rate at 23°C: Not Applicable	Odor Threshold: Not Available	
Solubility in Water at 23°C: Insoluble	Coefficient of Oil / Water Distribution: Not Available	pH: Not Applicable

**SECTION IV: FIRE AND EXPLOSION HAZARD DATA**

Flash Point (method used): N/A ( )TCC ( )TOC( )COC( )PMCC( )Seta	Flammable Limits: LEL: N/A UEL: N/A	Ignition Temperature: N/A
Special Fire and Explosion Hazards: No unusual hazards, however, dust generated during handling and storage can form explosive mixtures with air. Combustion products may be hazardous.		
Extinguishing Media: CO <sub>2</sub> , Dry Chemical Fog, Water Spray		
Special Fire fighting Procedures: Polypropylene is a slow burning plastic that generates a thick black smoke. Firefighters must wear self contained breathing apparatus. Garments for protection against thermal burns are recommended. Eye protection is strongly recommended.		

**SECTION V: REACTIVITY DATA**

Stability: (X) Stable ( ) Unstable Conditions to Avoid: None Determined
Incompatibility (Materials to Avoid): Water, Methylene Chloride, Potassium Permanganate, Liquid Chlorine
Hazardous Decomposition Products: CO, CO <sub>2</sub> , and Organic Oxidation Products
Hazardous Polymerization: (X) No ( ) Yes Conditions to Avoid: N/A

**SECTION VI: HEALTH HAZARD DATA**

Route of Entry: Skin contact, eye contact, and inhalation.
Effects of Acute Exposure: This material has the potential to cause irritation to the mucus membranes of the eyes, nose, mouth, and lungs during certain uses or processes. Molten polymer may cause severe burns.

## SECTION VI: HEALTH HAZARD DATA (continued)

Effects of Overexposure: Prolonged or repeated exposure to vapors or smoke resulting from thermal processing may result in irritation of the upper respiratory tract. Respiratory reactions were observed in laboratory rats exposed to general purpose polypropylene resin at 700° F.

Effect on Eyes:  No effect  Transient  Possible Irritation  Severe Irritation  Corrosive  
Effect on Skin:  No effect  Defatting  Possible Irritation  Severe Irritation  Corrosive  
 Potential sensitizer  Known sensitizer  Absorption through skin

In vitro tests (Ames Test, etc...) Test: N/A Result: N/A  
Test: N/A Result: N/A

Chronic Effects: N/A

Respiratory Protection: Respiratory protection approved by NIOSH/MSHA for protection against organic fumes and excessive airborne contaminants.

Appropriate respirator depends on type and magnitude of exposure.

Ventilation:  Local Exhaust: Required above hot plastic processing areas  
 Mechanical (general): Preferred to control general fumes

Protective Gloves:  No  Yes Specify: Gloves resistant to thermal burns.

Other Protective Equipment: Safety glasses recommended, emergency eye wash stations should be available in the work areas. Garments for protection against thermal burns to prevent contact with molten polymer must be worn.

Other Precautions: Wash contaminated clothing before reuse. Wash hands with soap and water prior to food consumption. Respiratory protection for precaution against dust generated during regrinding must be worn.

## SECTION VIII: FIRST AID MEASURES

Emergency and First Aid Procedures: Some individuals with specific sensitivities may exhibit eye, nose, throat, or dermal irritation if overexposed to processing fumes. Eye irritation: Flush eyes thoroughly with clean, low-pressure water. If a loose pellet should get into eyes, treat as one would a foreign contaminant and seek medical attention. In case of ingestion, give lots of water and seek medical attention, product in marketed form has minimal toxicity. Skin irritation: wash affected areas with soap and water. Respiratory Irritation: Leave the exposure area and obtain fresh air. Provide appropriate protection before allowing re-entry. A physician should be contacted if irritation persists. Molten resin can cause severe thermal burns, cool quickly with water and seek immediate expert medical attention. Do not peel off solidified material.

## SECTION IX: STORAGE AND HANDLING

Use appropriate personal protection equipment. Store in cool dry place, avoid excessive exposure to fumes released during processing. Avoid processing temperatures exceeding 550°F. Material can accumulate static charges that can cause incendiary electrical discharge. Keep away from sources of ignition and heat. The interior of molten polymer masses may remain hot for some time because of low thermal conductivity, use caution in handling.

## SECTION X: SPILL CLEAN-UP AND WASTE DISPOSAL

Steps to Be Taken in Case Material Is Released Or Spilled: Use appropriate personal protection equipment. If released or spilled, sweep and place in labeled container. Loose pellets may present a slipping hazard, clean immediately. If spilled in water, advise proper authorities and prevent entry into sewer if possible. If public is likely to be affected, notify proper authorities.

Waste Disposal Method: Reprocessing, recycling, incineration, or landfill in accordance with Local, State, and Federal regulations.

EPA Hazard Substance Category  X  A  B  C  D  N/A  
(40 CFR 116-117)  1  2  3  4  5  6

## SECTION XI: REGULATORY INFORMATION

The components of this product are either on the TSCA Inventory or exempt. All components in this product are listed on the Canadian Domestic Source List, DSL.

## SECTION XII: LABELING INFORMATION

DOT labeling information (49 CFR 100-199)

Proper Shipping Name:

Hazard Classification: N/A

Labels(s) required: N/A

UN or NA Identification Number: N/A

RECRA Information (40 CFR 122-124, 205-265)

Hazardous Water Number(s): N/A

Hazard Code(s): N/A

## SECTION XIII: PREPARATION INFORMATION

The data in this Material Safety Data Sheet applies only to the specific material designated herein and does not relate to use in combination with any other material or process. Information on this form is furnished solely for the purpose of compliance with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200, and the Canadian Environmental Protection Act, 1999, and shall not be used for any other purpose.

Material Safety Data Sheet (Similar to OSHA form 174)

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