



## MATERIAL SAFETY DATA SHEET

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DATE PREPARED: 10/21/2009  
ADX-2050

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ADX-2050  
Product Description: Talc-filled, Impact-modified Polypropylene  
Product Code: ADX-2050

**MANUFACTURER:**  
ADVANCED COMPOSITES, INC.  
1062 Fourth Ave  
Sidney, OH 45365  
Customer Service: (937) 575-9800

**24 HR. EMERGENCY CONTACT NUMBER:**  
CHEMTREC: (800) 424-9300

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

	<u>Wt%</u>	<u>CAS Registry #</u>
Polypropylene		9010-79-1
Rubber		
Talc		14807-96-6
Further Additives		
Pigment Portion		

#### COMMENTS:

The additives (if any are present in this product) are encapsulated in a thermoplastic resin with limited release under normal conditions of use, transportation and storage. Increased release may occur when the resin (or material/product manufactured from it) is subject to grinding, polishing, excessive heat, or other processes which enhance the potential for the generation of particulates, fumes, and /or vapors. A qualified health specialist should evaluate the specific potential for release under user's conditions of handling of this material.

The pigment portion may or may not be present in this material depending on if the finished product is pre-colored or natural.

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### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### PHYSICAL APPEARANCE:

Approximately 1/8"~3/8" white, translucent, opaque, or colored solid plastic pellets with slight to no odor.

##### IMMEDIATE CONCERNS:

Does not contain materials that may contribute to immediate health, physical, or environmental hazards.

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**ACUTE EFFECTS:**

In solid form, this polymer is not considered to be a health hazard, although the pellets and the dusts generated from them may be mildly irritating to the skin and eyes by mechanical action. If swallowed, polymer may pose possible intestinal obstruction. Dust created during handling or processing may be mildly irritating to the respiratory system.

**MEDICAL CONDITIONS AGGRAVATED:**

There are no known medical conditions aggravated by exposure to this product. However, certain sensitive individuals with respiratory impairments may be affected by exposure to components in the processing emissions.

**ROUTES OF ENTRY:**

Swallowing, Skin Contact, Eye, or Inhalation.

**IRRITANCY:**

When heated, this polymer may release fumes and/or vapors that are irritating to the eyes, nose, throat, and skin. Overexposure to fumes or vapors may also cause headache, nausea, shortness of breath, and cough. Molten or heated material can cause serious burns to unprotected skin and eyes.

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**4. FIRST AID MEASURES**

**EYES:**

If contacted by molten polymer, immediately flush eyes with plenty of cool water for at least 15 minutes. Do not permit victim to rub eyes. Get medical attention immediately!

**SKIN:**

If contacted by molten polymer, cool immediately with cold or ice water. Do not attempt removal of any solidified material. Get medical attention immediately!

**NOTE TO PHYSICIANS:** In the case of most burns, allow solidified material to slough off on its own. Attempted removal may lead to more damage of the skin and underlying tissue. If removal is indicated (e.g. solidified material is located on a critical part of the hand or face), removal with mineral oil is recommended. Due to the extremely high temperature of the molten polymer at the time of contact, bacterial infection under the material is unlikely to be present.

**INGESTION:**

If product is ingested, contact a physician or the Poison Control Center as appropriate whenever any foreign object is swallowed.

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**INHALATION:**

Immediately remove victim to fresh air. If victim has stopped breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention immediately!

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**5. FIRE FIGHTING MEASURES**

Flashpoint and Method: Not established  
Autoignition Temperature: >280°C (>536°F), ASTM E659

**FLAMMABLE CLASS:**

(1) However, please use caution when handling material near open flame. Material will ignite when exposed to direct flame, but will not burn readily.

**GENERAL HAZARD:**

(0) However, please use caution when handling material.

**UNUSUAL OR EXPLOSIVE HAZARDS:**

Hazardous melting or dripping can occur at elevated temperatures. Airborne dust can cause a fire or explosion hazard; see NFPA 654 "Dust Explosion Prevention, Plastics Industry 1975."

**EXTINGUISHING MEDIA:**

Use water spray, dry chemical, foam, or carbon dioxide.

**HAZARDOUS COMBUSTION PRODUCTS:**

Carbon monoxide is expected to be the primary combustion product.

**OTHER CONSIDERATIONS:**

REACTIVITY: (0)

**FIRE FIGHTING PROCEDURES:**

Note- Individuals should perform only those fire-fighting procedures for which they have been trained.

If possible, water should be applied as a spray from a fogging nozzle since this polymer is a surface burning material. The application of high velocity water will spread the burning layer.

**FIRE FIGHTING EQUIPMENT:**

Fire fighters should wear self-contained breathing apparatus in the positive pressure mode with a full-face piece when there is a possibility of exposure to smoke, fumes, or hazardous decomposition products.

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**6. ACCIDENTAL RELEASE MEASURES**

**SMALL SPILL:**

Use good housekeeping measures since spilled pellets may be a slipping hazard.

**LARGE SPILL:**

Wear appropriate respiratory protection and protective clothing as described in Section 8. Contain spilled material. Transfer to secure containers. In the event of an uncontrolled release of this material, the user should determine if the release is reportable under the applicable laws and regulations.

**GENERAL PROCEDURES:**

Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill release response plan should be developed and implemented. Plastic pellets are listed as "significant materials" by US EPA (40CFR 122.26(b)(12)) and may need to be discussed in an application for a storm water discharge permit.

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**7. HANDLING AND STORAGE**

**HANDLING:**

The handling of pellets in both loading and unloading operations as well as fabrication may cause dust to be formed, and necessary precautions for personal protection (see Section 8) should be used. When transferring pellets, precautions such as grounding and bonding can prevent the build up of static electricity.

**STORAGE:**

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

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:**

Engineering controls should be used whenever feasible to maintain concentration below acceptable exposure limits (Section 2) including, but not limited to, enclosures, local ventilation and dilution ventilation.

**PERSONAL PROTECTION**

**EYES AND FACE:**

Wear safety glasses meeting the specifications of OSHA 29CFR 1910.133/ ANSI Standard Z87.1 where no contact with the eye is

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anticipated. Chemical safety goggles meeting the specifications of OSHA 29CFR 1019.133/ ANSI Standard Z87.1 should be worn whenever there is a possibility of splashing or other contact with the eyes.

**RESPIRATORY:**

Where engineering controls are not feasible or sufficient to achieve full conformance with acceptable exposure limits (Section 2), use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminate(s) in the air and in accordance with OSHA 29CFR 1910.134/ANSI Z88.2.

**PROTECTIVE CLOTHING:**

Wear heat protective gloves and clothing if there is a potential for contact with the heated material.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Solid  
Odor: Slight to no odor  
Appearance: Approximately 1/8"~3/8" solid plastic pellets  
Color: White, translucent, opaque, or colored  
pH: none  
Percent Volatile: none  
Vapor Pressure: none  
Boiling Point: none  
Freezing Point: none  
Melting Point: 320~401°F, 160~205°C  
Solubility in Water: Insoluble  
Evaporation Rate: none  
Density: Not available  
Specific Gravity: Not available  
Viscosity: none  
Molecular Weight: Not available

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**10. STABILITY AND REACTIVITY**

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: May be decomposed by strong oxidizing agents such as nitric and sulfuric acid, halogens, hydrogen peroxide and chlorinating agents.

POLYMERIZATION: Not likely.

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CONDITIONS TO AVOID: May burn or react violently with fluorine/oxygen mixtures with 50~100% fluorine.

HAZARDOUS DECOMPOSITION: Under certain conditions, thermal decomposition products have been reported. They may include, but are not limited to, carbon, oxides of carbon, oxides of nitrogen, water, acrolein, formaldehyde, other aldehydes, ketones, alcohols, fatty acids, methane, ethane, acetylene, other organic vapors, and fumes. (See also Section 5)

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**11. TOXICOLOGICAL INFORMATION**

ACUTE:

Eyes: No data available  
Skin: No data available  
Ingestion: LD50 (oral) mouse: greater than 8g/kg

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**12. ECOLOGICAL INFORMATION**

ECOTOXICOLOGICAL INFORMATION:

No data is available on this product. However, birds, fish, and other wildlife may eat pellets that may obstruct their intestinal tracts.

CHEMICAL FATE INFORMATION:

This material is generally inert and insoluble and is not expected to have any adverse effect on the environment. This material may deteriorate by a number of mechanisms including photo- and thermo-oxidative degradation. Photodegraded polymers are also more easily biodegraded.

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**13. DISPOSAL CONSIDERATIONS**

PRODUCT DISPOSAL:

All recovered material should be packaged, labeled, transported, and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

RCRA HAZARD CLASS:

This material, if disposed of in its pure state, is not a hazardous waste under federal regulations.



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### GENERAL COMMENTS:

Information provided in this Material Safety Data Sheet applies only to the product as manufactured by Advanced Composites Inc. Processing, use, and contamination may make this information inappropriate for the material requiring disposal. State and local laws and regulations may differ from federal requirements, and requirements may change or be re-interpreted.

### COMMENTS:

It is the responsibility of the waste generator to characterize waste streams relative to the pertinent regulatory provisions (including RCRA "characteristic" waste definitions 40CFR 261 Subpart C) to ensure that applicable requirements are reviewed and met.

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## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

Technical Name: Compounded Polypropylene

Hot Hazard: no

Combustible Hot Drum: no

Combustible Class: no

Other Shipping Information: Not regulated by DOT as a hazardous material.

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## 15. REGULATORY INFORMATION

### UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

Fire: no      Pressure: no      Reactivity: no      Acute: no      Chronic: no

311/312 Hazard Categories: This product does not meet the criteria of any SARA hazard categories.

Title III Notes: This product contains no SARA "toxic chemicals" above threshold levels.

### TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA Regulatory: This product is (or if a mixture, the compounds of this product are) listed in the TSCA Inventory of Chemical Substances.



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### GENERAL COMMENTS:

The regulatory information presented here should not necessarily be considered as all-inclusive. Other local, state, federal, and international regulations may also apply.

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## 16. OTHER INFORMATION

Approved by: Scott Szczerowski  
Title: Material Development Engineer  
Approval Date: 10/21/2009  
Information Contact: scott.szczerowski@advcmp.com

### MANUFACTURER DISCLAIMER:

The information presented herein has been obtained from sources believed to be reliable. The information in Section 11 (Toxicological Information), 12 (Ecological Information), and 15 (Regulatory Information) represents selected data that Advanced Composites Inc. believes may be pertinent for the use of this material. However, because of the possibility of human or mechanical error by our sources, Advanced Composites Inc., or others, Advanced Composites Inc. does not guarantee the accuracy, adequacy, or completeness of any information, and is not responsible for any errors or omissions or for any results obtained from the use of such information. We assume no liability or responsibility, expressed or implied, for errors or omissions of any kind, and no warranties or merchantability or fitness, expressed or implied, is made or is to be implied. Consequently, you should review the information to determine whether it is adequate and appropriate to all aspects of your intended use of this material.