MATERIAL SAFETY DATA SHEET

DATE: 01/02/2004

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **ADVANTAGE STRUCTURAL FIBER**
PRODUCT DESCRIPTION: POLYPROPYLENE HOMOPOLYMER RESIN

MANUFACTURER:
GENERAL RESOURCE TECHNOLOGY
2978 Center Court
Eagan, MN 55121
(800) 324-8154 Toll-Free

24 HOUR EMERGENCY NUMBERS

(612) 741-3041
(612) 816-6401

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	WT.%	CAS#	EINECS#
POLYPROPYLENE HOMOPOLYMER	100	9003-07-0	

Comments: This product is not considered a hazardous material at temperatures below the melting point as determined by Bassell according to the U.S. Occupational Safety and Health Act definitions and regulations, including the Hazard Communication Standard 29 CFR 1910-1200. This product is not considered a controlled substance by Bassell according to Canada's WHMIS regulations. Threshold Limit Values (TLV) or Permissible Exposure Limit (PEL) values are not established. This material is not expected to cause physiological impairment at low concentration. Until a specific TLV is adopted by the ACGIH (American Conference of Governmental Hygienists), or an OSHA (Occupational Safety and Health Administration) PEL standard is issued, Bassell suggests that this material be treated as a nuisance dust or particulate in accordance with the recommendations of ACGIH.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White Powdery Spherical Solid

IMMEDIATE CONCERNS: Spilled material may present a slipping hazard. This product as shipped is not classified as a combustible dust; however, a combustible concentration of dust may occur if fines are suspended in air. Avoid contact with strong oxidizing agents. When working with the material at temperatures above the melting point, the material will begin to decompose producing fumes that can contain carbon dioxide, carbon monoxide, ketones, acrolein, formaldehyde, aldehydes, and other unidentified organic compounds that come from the breakdown of the material. Adequate room and extruder ventilation should be provided to minimize exposures.

POTENTIAL HEALTH EFFECTS

EYES: Process vapors may irritate eyes.
SKIN: Exposure to molten resin may cause thermal burns.
INGESTION: Not applicable.
INHALATION: Process vapors may cause respiratory tract irritation.

SIGNS AND SYMPTONS OF EXPOSURE

EYES: Irritation of redness.
SKIN: Not applicable.
INGESTION: Not applicable.
INHALATION: Irritation of the nose, throat and respiratory tract.
ACUTE TOXICITY: Exposure to process vapors may cause eye and respiratory tract irritation.
CHRONIC: None known.
CARCINOGENICITY: None known.
MUTAGENICITY: None known.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: None known.
TERATOGENIC EFFECTS: None known.

MEDICAL CONDITIONS AGGRAVATED: None known.
ROUTES OF ENTRY: Eyes, Inhalation.
TARGET ORGAN STATEMENT: None known.
CANCER STATEMENT: This product is not considered to be a carcinogen by OSHA, IARC or NTP.
IRRITANCY: Exposure to process vapors may cause eye and respiratory tract irritation.
SENSITIZATION: None known.

WARNING CAUTION LABELS

Burn Risk: Avoid contact with molten resin.
Explosion Risk: Prevent accumulation of dust particles.
Slipping Risk: Keep walking surfaces free of spilled material.
Vapor Risk: Provide ventilation to avoid exposure to process vapors.

COMMENTS HEALTH: None.
HEALTH HAZARDS: None known.
PHYSICAL HAZARDS: Spilled material may present a slipping hazard. Exposure to molten resin may cause thermal burns.

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4. FIRST AID MEASURES

EYES: Flush eyes with water for 15 minutes. Get medical attention.
SKIN: Molten Resin: If molten resin material comes in contact with the skin, cool under ice water or a running stream of water. DO NOT attempt to remove the material from the skin. Removal could result in severe tissue damage. Get medical attention.
INGESTION: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
ANTIDOTES: Not Applicable.

Notes To Physician: None.
Additional Information: None.

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5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: **>** 329˚C (625˚F)
FLAMMABLE LIMITS: Not Determined
AUTOIGNITION TEMPERATURE: > 357˚C (675˚F)
EXTINGUISHING MEDIA: Use foam, carbon dioxide, or water spray when fighting fires involving this material.

HAZARDOUS COMBUSTION PRODUCTS

Carbon dioxide, carbon monoxide, ketones, acrolein, aldehydes, unidentified organic compounds.

EXPLOSION HAZARDS: Product as shipped is not a combustible dust. However, a combustible concentration of dust may occur when fines are suspended in air.
FIRE FIGHTING PROCEDURES: Standard procedures for Class A fires.
FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained pressure demand breathing apparatus.
SENSITIVE TO STATIC DISCHARGE: Static discharge could be an ignition source for a combustible concentration of dust.
SENSITIVITY TO IMPACT: Not Applicable.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Sweep up material and place in a disposable container.
LARGE SPILL: Sweep up material and place in a disposable container.

ENVIRONMENTAL PRECAUTIONS
WATER SPILL: Keep resin out of waterways.
LAND SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.
SPECIAL PROTECTIVE EQUIPMENT: None.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks and flames.
HANDLING: Ground and bond containers when transferring material.
STORAGE: This product may react with strong oxidizing agents and should not be stored near such materials. Store boxes and bags of material in areas protected with automatic sprinklers.
STORAGE TEMPERATURE: 60˚C (140˚F) maximum.

ELECTROSTATIC ACCUMULATION HAZARD: Material may accumulate static charges during transfers.Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate room ventilation. Provide adequate ventilation at the extruder to minimize exposure to process vapors. Eliminate ignition sources during repair and maintenance operations.

PERSONAL PROTECTIVE EQUIPMENT
EYES AND FACE: Wear safety glasses with side shields (or goggles).
SKIN: When handling or processing resins at elevated temperatures or in a molten state, wear protective clothing over the skin to prevent contact. Wear suitable gloves.
RESPIRATORY: A respiratory protection program that meets OSHA 1910.134, ANSI Z88.2 and/or CSA Z94.4-93 requirements must be followed whenever workplace conditions warrant use of a respirator.

OTHER USE OF PRECAUTIONS: Eyewash fountains and safety showers should be accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid.	**BOILING POINT:**	Not applicable.
ODOR:	Slight waxy odor.	**FREEZING POINT:**	Not applicable.
APPEARANCE:	Powder or Spheres.	**MELTING POINT:**	160˚C (320˚F)
COLOR:	Translucent to White.	**SPECIFIC GRAVITY:**	0.88 to 0.92

COMMENTS
PERCENT VOLATILE: < 0.4%
VAPOR PRESSURE: Not applicable.
VAPOR DENSITY: Not applicable.
WATER SOLUBILITY: Negligible.

10. STABILITY AND REACTIVITY

STABLE:	YES
HAZARDOUS POLYMERIZATION:	NO
CONDITIONS TO AVOID:	Keep away from heat, sparks and flame.
POLYMERIZATION:	Product will not undergo polymerization.

HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperatures the material will begin to decompose, producing fumes that can contain carbon dioxide, carbon monoxide, ketones, acrolein, aldehydes and unidentified organic compounds.

11. TOXICOLOGICAL INFORMATION

General Comments: Polypropylene Homopolymer Toxicological Information LD50/LC50 - LETHAL DOSE/CONC 50% KILL A. RAT 1. LD50; Route Intraperitoneal; Dose: > 110 gm/kg; Toxic effects: Sense organs and special senses - Ptosis; Behavioral - Convulsions or effect on seizure threshold; REFERENCE: Yakuri to Chiryo. Pharmacology and Therapeutics 14:1109, 1986. 2. LD50; Route: Intravenous; Dose: > 99 gm/kg; Toxic Effects: Behavioral - Tremor - Lung, Thorax or Respiration - Cyanosis; Nutritional and Gross Metabolic - Body temperature decrease; REFERENCE: Yakuri to Chiryo, Pharmacology and Therapeutics 14:1109, 1986.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:	Not available.	**CHEMICAL FATE INFO:**	Not readily biodegradable.
DISTRIBUTION:	Not determined.	**ECOTOXICOLOGICAL INFO:**	Not determined.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: (1) Recycle (Reprocess). (2) Incineration, including energy recovery of waste material in a permitted facility in accordance with local, state or provincial and federal regulations. (3) Landfill in a licensed facility in accordance with local, state or provincial and federal regulations.

RCRA HAZARD CLASS: This product is not judged to be a hazardous waste by any local, state, provincial or federal regulations; however, it may be listed as industrial waste in some states or provinces. This product is not listed in the U.S. Federal Hazardous Waste Regulations, 40 CFR 261.33 paragraphs (e) or (f), i.e. chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261 Subpart C. State or local hazardous waste regulations may apply if different from the federal.

TRANSPORT INFORMATION

SPECIAL SHIPPING NOTES: This product is not regulated by DOT, IMO, IATA, Canadian TDG and associated regulations, ADR or RID.

REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

TITLE III NOTES: This product is not subject to SARA TITLE III requirements.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients in this product are in compliance with TSCA.

OSHA HAZARD COMM. RULE: This product is not considered a hazardous material at temperatures below the melting point as determined by Bassell according to OSHA definitions.

(END)