

# Safety Data Sheet

Polyethylene JA Series, PE380, PE400

MSDS No. 16001.5

Date of Preparation: 5/4/05

Revision: 10/4/13

## Section 1 - Chemical Product and Company Identification

**Product:** Polyethylene JA Series, PE380, PE400

**Manufacturer:** Marshall Additive Technologies

Division of the R. J. Marshall Company

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**Emergency Phone:** (800) 424-9300

**Date Revised:** 10/4/13

**Preparer:** Stephanie Nichols

## Section 2 - Hazards Identification

This product is not hazardous under the criteria of the U.S Occupational Safety and Health Standard 29CFR1910 Subpart Z and United Nations GHS Parts 2, 3, and 4.

The product may be coated with finishes which do not present a significant health hazard in their normal use. If heated to elevated temperatures during processing, these finishes can degrade and generate off gases which may contain small amounts of chemicals. Local exhaust ventilation is recommended.

**HMIS**

**H** 0

**F** 1

**R** 0

**PPE** † E

†Sec. 8

## Section 3 - Composition / Information on Ingredients

Ingredient Name	CAS Number	Percent by Weight
Polyethylene	9002-88-4	>95%
Polyvinyl Alcohol	9002-89-5	<5%

## Section 4 - First Aid Measures

**Inhalation:** Inhalation of fibers or fiber dust may cause respiratory irritation. Move to fresh air if effects occur. Consult a physician if symptoms develop.

**Eye Contact:** Fibers or fiber dust may cause irritation or scratch the surface of the eyes. Flush with water to remove particles. Remove contact lenses if present and part eyelids with fingers to ensure complete flushing. Consult a physician if symptoms develop.

**Skin Contact:** If thermal burn, cool with water and seek immediate medical attention; do not attempt to peel molten fibers from skin. Non-thermal contact with fibers may cause mechanical irritation of the skin. Wash off with soap and water, and consult a physician if symptoms develop.

**Ingestion:** No adverse effects are believed to occur from swallowing a small amount. Consult a physician if symptoms develop or if a large amount is swallowed.

*After first aid, get appropriate in-plant, paramedic, or community medical support.*

## Section 5 - Fire-Fighting Measures

**Extinguishing Media:** Water, CO2, Dry Chemical.

**Unusual Fire or Explosion Hazards:** As with many solids, any dust that is generated may be explosive if mixed with air in critical proportions and in the presence of a source of ignition.

**Hazardous Combustion Products:** May include, but are not limited to, CO and CO2.

**Fire-Fighting Instructions:** Keep unnecessary and unprotected personnel away. Avoid excessive inhalation of smoke or vapors. Keep product and surrounding areas cool by spraying water. If outdoors, fight fire from an upwind position.

**Fire-Fighting Equipment:** Due to potential decomposition of the polymer, firefighters should be equipped with positive pressure self-contained breathing apparatus (SCBA) and standard protective fire fighting clothing (helmet, eye protection, overalls, boots, and gloves) when fighting all indoor fires and any significant outdoor fires.

## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** Sweep up or vacuum and place in appropriate disposal container. Dispose of at an approved landfill or reuse.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** None.

**Storage Requirements:** Do not store near flame or incompatible materials. Maintain good housekeeping to control dust accumulations. Store at temperatures below 60C (150F).

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:**

**Ventilation:** Local exhaust for fiber dust only.

**Administrative Controls:**

**Respiratory Protection:** For operations where inhalation exposure can occur, a NIOSH approved respirator recommended by an industrial hygienist may be necessary.

**Protective Clothing/Equipment:** For operations where eye or face contact can occur, eye protection such as goggles or a face shield is recommended.

Ingredient	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Polyethylene	none estab.	none estab.	none estab.	none estab.
Polyvinyl Alcohol	none estab.	none estab.	none estab.	none estab.

Fiber dust should be considered a nuisance dust, i.e. particulated not otherwise classified.

ACGIH TLV: 10mg/m<sup>3</sup> total dust; 3 mg/m<sup>3</sup> respirable dust

OSHA PEL: 15 mg/m<sup>3</sup> total dust; 5 mg/m<sup>3</sup> respirable dust

## Section 9 - Physical and Chemical Properties

**Physical State:** solid

**Appearance and Odor:** white solid, no odor

**Odor Threshold:** n/e

**Formula Weight:** n/a

**Density:** n/a

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** 0.96

**pH:** no data available

**Flash Point:** >200C

**Flash Point Method:** n/a

**Burning Rate:** Not determined.

**Auto-ignition Temperature:** Not determined.

**Flammability Classification:** Non-flammable.

**Water Solubility:** Negligible

**Other Solubilities:** n/a

**Boiling Point:** n/a

**Freezing/Melting Point:** 135C (320F)

**Viscosity:** n/a

**Refractive Index:** n/a

**Surface Tension:** n/a

**% Volatile:** <2% (water)

**Evaporation Rate:** Negligible

**Vapor Pressure:** n/e

**Vapor Density (Air=1):** n/a

**Decomposition Temp:** No data available

**Shelf Life:** Does not expire

## Section 10 - Stability and Reactivity

**Reactivity:** Data not available.

**Stability:** This product is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** None anticipated under normal or recommended handling and storage conditions.

**Chemical Incompatibilities:** Tends to decompose in strong acids and bases.

**Conditions to Avoid:** Excessive heat shall be avoided. Small quantities of fumes are evolved at about 225C (435F). These gradually increase until at above 300C decomposition and oxidative pyrolysis take place. Above 300C the heat of oxidation may produce a rapid rise in temperature which accelerates the pyrolysis. Under these circumstances hazardous substances such as carbon monoxide, formaldehyde, and acrolein can be evolved.

**Hazardous Decomposition Products:** None anticipated under normal or recommended handling and storage conditions.

## Section 11- Toxicological Information

Health Hazards (Acute and Chronic): According to the hypothesis of Stanton-Pott, it is reported that there is a possibility of causing cancer when ultra-fine fibers below 0.25 um in diameter and above 8 um in length are absorbed into the lung. When this product was observed with the electron microscope, the diameter of the fibers was above 1 um and the average length was over 100 um; therefore the values were higher than those provided by this hypothesis. However, in the manufacturing process, the product may be reduced into ultra-fine fibers that come within the range presented in the Stanton-Pott hypothesis.

Carcinogenicity: NTP-not listed IARC: 3-not classifiable as to its carcinogenicity to humans. OSHA-not regulated.

Signs & Symptoms of exposure: No data available.

Medical Conditions Aggravated by Exposure: Some individuals, e.g. with asthma or bronchitis, are likely to be intolerant of high concentrations of airborne fibers or fiber dust when processing.

## Section 12 - Ecological Information

Ecotoxicity: No data available.

Persistence and Biodegradability: Fiber is not biodegradable.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

## Section 13 - Disposal Considerations

**Disposal:** Dispose as non-hazardous solid waste in sanitary landfill or incinerate according to Federal, State, and local regulations. Do not incinerate closed containers.

## Section 14 - Transport Information

### DOT Transportation Data (49 CFR 172.101):

Polyethylene Pulp  
NFM No. 68310  
Class: 100  
HTC No. 3920.10

US DOT: Not regulated  
ICAO/IATA: Not regulated  
IMDG: Not regulated  
Canada TDG: Not regulated

## Section 15 - Regulatory Information

### EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification: Not classified

CERCLA Hazardous Substance (40 CFR 302.4) Not listed

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

### OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

### TSCA

This substance or all of its components are on the Chemical Substances Inventory of the Toxic Substance Control Act (TSCA Inventory [USA]). Please note that this product is not subject to any legal reporting requirements under these acts.

### State Regulations:

California: Proposition 65-Does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

### International Regulations:

Canada WHMIS: Not a controlled product.

Canada DSL: This product, or all its ingredients, is certified for inclusion on the Canadian Domestic Substance List.

Europe: Not classified as dangerous according to Directive 1999/45/EC. This product is RoHS compliant.

UN: Does not appear on the dangerous goods list.

**Section 16 - Other Information**

**Prepared By:** Stephanie Nichols  
**Revision Notes:** Updated throughout.

**Product Grades Available from the R. J. Marshall Company** (this list may be incomplete):

24JA	25JA	26JA	27JA	PE380	PE400
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