Safety Data Sheet

Polyethylene JA Series, PE380, PE400, PE2000

Date of Preparation: 5/4/05

Section 1 - Chemical Product and Company Identification

 Product: Polyethylene JA Series, PE380, PE400, PE2000

 Other means of identification: HDPE, Polyethylene, Polyalkene, Polythene, Polyolefin, Olefin

 Recommended use of the chemical: Varies

 Restrictions on use: None known

 Manufacturer: Marshall Additive Technologies

 Division of the R. J. Marshall Company

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Section 2 - Hazards Identification

Classification of the chemical: This product is not hazardous under the criteria of the U.S Occupational Safety and Health Standard 29CFR1910 Subpart Z and United Nations Global Harmonized System (GHS). Signal word: None Hazard Statements: None Pictograms: None Precautionary Statements: None Description of hazards not otherwise classified: None

Ingredient	Name	CAS Number
Polyethyle	ne	9002-88-4

Common names and synonyms: Ethene, hompolymer

Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance: None

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.

Most important symptoms/effects, acute and delayed:

Inhalation, skin, eye: May cause irritation.

Ingestion: Unknown.

Indication of immediate medical attention and special treatment needed, if necessary: None known.

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Suitable Extinguishing Media: Water, CO₂, dry chemical, foam, fog, sand.

Unsuitable Extinguishing Media: None known.

Specific hazards arising from the chemical: 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

Personal precautions, protective equipment, and emergency procedures: A dust mask and goggles are recommended to prevent possible irritation from airborne fibers.

Methods and materials for containment and cleaning up: Sweep up or vacuum and place in appropriate disposal container. Avoid the use of air jets if possible to prevent fibers from becoming airborne. Dispose of at an approved landfill or reuse.

Section 7 - Handling and Storage

Precautions for safe handling: Wash skin after handling material. Maintain good housekeeping to control dust accumulations. Avoid overstacking to prevent collapse or shifting of the packages. Avoid storing the product for long periods of time with heavy weight stacked or placed on top of the bags. This will cause the product to compact and may cause problems with dispersion. Storage with, or next to, chlorine or chlorinated products is not recommended.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Local exhaust may be used to reduce exposure to airborne fibers or fiber dust. Processing involving the use of elevated temperatures should only be carried out in areas with adequate ventilation.

Administrative Controls:

Respiratory Protection: A dust mask is recommended to prevent possible irritation from airborne fibers.

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

Special requirements for PPE: None

	OSH	OSHA PEL		H TLV
Ingredient	TWA	STEL	TWA	STEL
Polyethylene	none estab.	none estab.	none estab.	none estab.

Polyethylene |none estab. |none estab. |none estab. | Fiber dust should be considered a nuisance dust, i.e. particulates not otherwise classified.

ACGIH TLV: Not established

OSHA PEL: 15 mg/m³ total dust; 5 mg/m³ respirable dust

Section 9 - Physical and Chemical Properties

Appearance: white solid Odor: none Odor Threshold: not available pH: not available Freezing/Melting Point: 125-135°C (257-275°F) Boiling Point: not applicable Flash Point: >200°C (>392°F) Flash Point Method: n/a Evaporation Rate: not applicable Flammability: Non-flammable Upper/lower flammability or explosive limits: not applicable Vapor Pressure: not applicable Vapor Density (Air=1): not applicable Relative Density: 0.96 Water Solubility: not soluble Other Solubilities: not available Partition coefficient: n-octanol/water; not available Auto-ignition Temperature: not available Decomposition Temp: No available Viscosity: not applicable Shelf Life: Does not expire

Section 10 - Stability and Reactivity

Reactivity: Data not available.

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

Possibility of hazardous reactions: None anticipated under normal or recommended handling and storage conditions. **Conditions to Avoid:** None known.

Chemical Incompatibilities: Strong oxidizers.

Hazardous Decomposition Products: Carbon oxides, organic acids.

Section 11- Toxicological Information

Information on the likely routes of exposure:

Inhalation: Possible inhalation of airborne fibers or dust.

Ingestion: Unlikely to occur.

Skin: Not known to occur.

Eyes: Possible contact with airborne fibers or dust.

Symptoms related to the physical, chemical, and toxicological characteristics:

Inhalation: May include coughing, sneezing, or itching of the nasal passages.

Ingestion: Ingestion of large amounts of fibers may cause gastrointestinal blockage.

Skin: May including itching or redness of the skin.

Eyes: May include itching, watering, or redness of the eyes.

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Delayed or immediate effects may include respiratory irritation, skin irritation, or eye irritation. No chronic effects from short-term exposure are known to occur. Effects from long-term exposure are unknown.

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.

Numerical measures of toxicity:

Acute toxicity:

Oral (rat): LD: >3 g/kg Oral (mouse): LD: 5 g/kg **Carcinogenicity:** NTP-not listed

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

Section 12 - Ecological Information

Ecotoxicity: No data available. **Persistence and Biodegradibility:** Fiber is not biodegradable. **Bioaccumulative Potential:** No data available. **Mobility in Soil:** Unlikely.

Section 13 - Disposal Considerations

Disposal: Dispose as non-hazardous solid waste in accordance with governmental regulations. No special precautions for landfills or incineration activities.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

UN Number: None UN proper shipping name: None Transport hazard classes: US DOT: Not regulated ICAO/IATA: Not regulated IMDG: Not regulated Canada TDG: Not regulated

Packing group number: None Environmental hazards: None known Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable Special precautions: None known

Polyethylene Pulp NFMC No. 68310 Sub 6 Class: 100 HTC No. 3901.20

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:

Australia AICS: Listed Canada WHMIS: Not a controlled product. Canada DSL: Listed China IECSC: Listed Europe: Not classified as dangerous according to Directive 1999/45/EC. This product is RoHS compliant. Europe EINECS: Listed; 618-339-3 Europe REACH: Not applicable due to article status. Japan ENCS: Listed Korea KECI: Listed, KE-28877 New Zealand NZIOC: Listed Taiwan NECI: Listed UN: Does not appear on the dangerous goods list.

Section 16 - Other Information

Prepared By: Stephanie Nichols **Revision Notes:** Added PE2000

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

24JA	25JA	26JA	27JA	PE28JA
PE380	PE400	PE2000		

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