SAFETY DATA SHEET
PRODUCT NAME: Polystyrene
EFFECTIVE DATE: March 30, 2016
COMPANY: RAPAC, LP, Oakland, TN

SECTION 1: IDENTIFICATION

PRODUCT NAME: Polystyrene
OTHER MEANS OF IDENTIFICATION: _rPS_ Polystyrene
RECOMMENDED USE AND RESTRICTIONS: Polystyrene Resin
COMPANY INFORMATION:

RAPAC, LP
65 Industrial Park Road
Oakland, Tennessee 38060

WEBSITE: www.rapac.com

TELEPHONE NUMBERS:
Customer Service: (901) 466-7500
Technical Services: (901) 466-7559

EMERGENCY PHONE NUMBER: CHEMTREC: (800) 424-9300

SECTION 2: HAZARD IDENTIFICATION

CLASSIFICATION: Eye Irritant: mildly irritating to eyes
HAZARD STATEMENT: WARNING: Eye Irritant
HAZARDS NOT CLASSIFIED: None

SECTION 3: COMPOSITION

CHEMICAL NAME	CAS NUMBER	COMPOSITION %	EXPOSURE LIMITS
Polystyrene $(C_8H_8)_x$	9003-53-6	99-100	None

SECTION 4: FIRST-AID MEASURES

EYE CONTACT: Eye Irritant: mildly irritating to eyes. Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. May cause injury due to mechanical action.
SKIN CONTACT: Essentially non-irritating to skin. Mechanical injury only. Wash skin with plenty of water. Seek first aid or medical attention as needed. If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage. Seek medical attention immediately.
INHALATION: Dust may cause irritation to upper respiratory tract (nose and throat). Vapors released during thermal processing may cause respiratory irritation. Move person to fresh air; if effects occur, consult a physician.
INGESTION: Harmful effects not anticipated from swallowing small amounts. If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.
NOTES TO PHYSICIAN: If burn is present, treat as any thermal burn after decontamination. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
EMERGENCY PERSONNEL PROTECTION: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.
FIRE FIGHTING PROCEDURES: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon dioxide. Carbon monoxide.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

METHOD OF CLEANUP: Contain spilled material if possible. Sweep up. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for more information.

SECTION 7: HANDLING AND STORAGE

GENERAL HANDLING: No smoking, open flames, or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Avoid breathing
process fumes. Use with adequate ventilation. When appropriate, unique handling information for containers can be found on the product label. Workers should be protected from the possibility of contact with molten resin. Do not get molten material in eyes, on skin or clothing. Keep away from heat, sparks, and flame. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge. See Section 8, Exposure Controls and Personal Protection.

STORAGE: Store in a dry place. Store in accordance with good manufacturing practices.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS: NONE ESTABLISHED

APPROPRIATE ENGINEERING CONTROLS: Use local exhaust ventilation or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed. When handling hot material, a safety shower should be located in the immediate work area.

HAND PROTECTION: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. Use gloves to protect from mechanical injury. Selection of gloves will depend on the task. Use gloves with insulation for thermal protection, when needed.

RESPIRATORY PROTECTION: Respiratory protection should be work when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experiences, or where indicated by your risk assessment process. Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present. The following should be effective types of air-purifying respirators: When dust/mist are present use a particulate filter. When combinations of vapors, acids, or dusts/mists are present, use an organic vapor cartridge with a particulate pre-filter.

INGESTION: Use good personal hygiene. No not consume or store food in the work area. Wash hands before smoking or eating.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear pellets

ODOR: None

ODOR THRESHOLD: No test data available

pH: Not applicable

MELTING POINT/FREEZING POINT: Not applicable
INITIAL BOILING POINT AND BOILING RANGE: Not applicable
FLASH POINT: Not applicable
EVAPORATION RATE: Not applicable
FLAMMABILITY: No
UPPER/LOWER FLAMMABILITY LIMITS: Not applicable
VAPOR PRESSURE: Not applicable
VAPOR DENSITY: Not applicable
RELATIVE DENSITY: Not applicable
SOLUBILITY: Insoluble
PARTITION COEFFICIENT: No data available for this product
AUTO-IGNITION TEMPERATURE: 427°C (800°F)
DECOMPOSITION TEMPERATURE: No test data available
VISCOCITY: Not applicable

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: This material reacts violently with:
AIR____ WATER____ HEAT____ STRONG OXIDIZERS____ OTHERS____ NONE OF THESE__X__
STABILITY/INSTABILITY: Stable under recommended storage conditions. See Section 7, Handling and Storage.
POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur
CONDITIONS TO AVOID: Avoid temperatures above 300°C. Exposure to elevated temperatures can cause product to decompose.
INCOMPATIBLE MATERIALS: None known
HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products depend on temperature, air supply, and the presence of other materials. Processing may release fumes and other decomposition products. At temperature exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating. Decomposition products can include and are not limited to: Combustible gases.

SECTION 11: TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Eye contact and skin contact most likely.
SYMPTOMS AND EFFECTS OF EXPOSURE:

EYE CONTACT: Eye Irritant: mildly irritating to eyes. Solid or dust may cause irritation or corneal injury due to mechanical action. Elevated temperatures may generate vapor levels sufficient to cause eye irritation. Effects may include discomfort and redness.

SKIN CONTACT: Prolonged contact is essentially nonirritating to skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

ABSORPTION: No adverse effects anticipated by skin absorption.

INHALATION: Dust may cause irritation to upper respiratory tract (nose and throat). Vapors released during thermal processing may cause respiratory irritation.

INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking if swallowed.

TOXICITY: No data available
CARCINOGENICITY:

OSHA: not listed
IARC: Group 3 (not classifiable as to its carcinogenicity to humans)
NTP: not listed

Product has not been found to be a potential carcinogen by OSHA, International Agency for Research on Cancer, or the National Toxicology Program.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

PERSISTANCE AND DEGRADABILITY: This water-insoluble polymeric solid is expected to be inert in the environment. Surface photo degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.
BIOACCUMULATIVE POTENTIAL: No bio concentration of the polymeric component is expected because of its high molecular weight. In the aquatic environment, material will sink and remain in the sediment.
MOBILITY IN SOIL: Material is expected to remain in the soil.

SECTION 13: DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial, and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 3: Composition Information.
FOR UNUSED AND UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator, or other thermal destruction device.

SECTION 14: TRANSPORT INFORMATION

DG SMALL CONTAINER: Not regulated
TDG LARGE CONTAINER: Not regulated
IMDG: Not regulated
ICAO/IATA: Not regulated

SECTION 15: REGULATORY INFORMATION

U.S. TOXIC SUBSTANCES CONTROL ACT: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30
CEPA – DOMESTIC SUBSTANCES LIST (DSL): All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.
HAZARDOUS PROUCTS ACT INFORMATION: CPR COMPLIANCE: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.
HAZARDOUS PRODUCTS ACT INFORMATION: WHMIS CLASSIFICATION: This product is not a "Controlled Product" under WHMIS.
Pertinent information associated with this product as related to SARA Title III provisions is as follows:
Section 302/304 Extremely Hazardous Substances: None
Section 311 Hazardous Categorization:
Acute __ Chronic __ Fire ___ Pressure ___ Reactive ___ N/A _X__
Section 313 Toxic Chemicals: None

Pertinent information related to CERCLA provisions of SARA is as follows:
CERCLA 102(a)/DOT Hazardous Substances: None

SECTION 16: OTHER INFORMATION

The information contained herein is believed to be accurate. It is provided for the purpose of hazard communication in accordance with OSHA guidelines as part of RAPAC's Product Safety Program. It is not intended to constitute performance information concerning the product and accuracy or completeness of the information contained herein, or the product results in any specific instance, and hereby expressly disclaims any implied warranties or merchantability or fitness for a particular purpose, or any other warranties or representations whatsoever, expressed or implied.

Purchasers and users of this product are encouraged and requested to advice those who may come in contact with this product of the information contained herein.

To determine applicability or effects of any law or regulation with respect to the product, users should consult their legal advisor or the appropriate government agency. RAPAC does not undertake to furnish advice on such matters.