



# Material Safety Datasheet

## FLAME RETARDANT POLYSTYRENE ( NON-DECA)



REVISION DATE : JAN'06  
SPL / SPS / T2C1 / 0106

### 1) Identification of the Substance / Preparation & company / Undertaking :

#### 1.1) Identification of the Substance / Preparation :

**Product** : Flame Retardant Impact Polystyrene  
**Synonyms** : "Supreme" FR- Impact Polystyrene  
**Product Grades** : SP562/ SP564/ SP566  
**Chemical Family** : Rubber Modified Polystyrene thermoplastics polymer

#### 1.2) Identification of the Company / Undertaking:

**Contact** : Supreme Petrochem Limited,  
17/18, Shah Industrial Estate, Veera Desai Road,  
Andheri (W), Mumbai - 400 053, India  
Tel : 0091 22 2673 6196-99  
Fax : 0091 22 2673 6203 / 5693 5930

**E-mail** : export@spl.co.in

**Web Site** : [www.supremepetrochem.com](http://www.supremepetrochem.com)

#### 1.3) Emergency Calls : 0091 22 5693 5929

### 2) Composition / Information on Ingredients:

Components	CAS Registry No.	Content (w/w)
Styrene, polymer With 1,3-butadiene	9003-55-8	70-90%
Mineral Oil	8042-47-5	< 3 %
Flame Retardant	21850-44-2	< 5 %
Antimony trioxide	1309-64-4	< 5%

### 3) Hazard Identification:

#### 3.1) Critical Hazards to Man:

**General** : Normal handling with general ventilation would not expose operating personnel to safety and health hazards.  
**Eye Contact** : May cause mechanical irritation.  
**Inhalation** : Dust may cause mechanical irritation. Under normal industrial use there is no exposure to dust or vapour above health hazard limits.  
**Skin Contact** : None known  
**Ingestion** : Biologically inert. Extremely unlikely route of entry.  
Other effects : None

#### 3.2) Critical Hazards to Environment :

The substance / preparation is stable under normal conditions of storage and use. It is not hazardous to the environment in its normal state.

### 4) First Aid Measures :

#### Symptoms, Effects, Indications for Immediate Action :

**Eye Contact** : In case of eye contact, wash them with abundant water, without scrubbing with the hands. In case of contact lenses use, take them out immediately. Consult a physician if some irritation persists.

**Inhalation** : A mild breathing dust, process fumes and vapours, because they can cause irritation in throat and respiratory tract. In case of inhalation, keep the person in a well-ventilated room, and call a physician if breathing difficulties appear.

**Skin Contact** : Wash the contaminated one with soap and water in case of process vapours contact. In case of contact with molten resin, cool the skin immediately with water and consult a physician. Contact with process fumes / vapours can produce skin irritation.

**Ingestion** : The ingestion is very improbable due to pellet shape. This material does not present a significant degree of toxicity. If considerable material quantities are swallowed, ask for medical assistance.

### 5) Fire Fighting Measures :

**Flash point and Method used** : N/A

**Flammability limits in Air** : N/A

**Auto Ignition Temperature** : N/A

**Unusual Fire and Explosion** : when included in a fire, burns with a sooty flame and release fumes made up of water, carbon dioxide, carbon monoxide (when starved of oxygen) and other combustion products. Overheating / pyrolysis of pellets vapours made up of monomers, low molecular weight polymers and other oxidation products.

**Extinguishing Media** : Water foam, carbon dioxide and dry chemical

**Special Fire Fighting Instructions** : Use approved self-contained breathing apparatus, respirator and approved personal protective clothing (like helmet, goggles, fire resistant clothes, boots, etc.).

### 6) Spillage, Accidental Release Measures :

#### 6.1) Personal Precautions:

Do not walk on pellets to avoid slipping.

#### 6.2) Environmental Precautions:

Keep away from drains.

#### 6.3) Methods for Cleaning:

Collect mechanically. Reuse, if possible or dispose off as required by national and local regulations.

### 7) Handling and Storage :

While the handling of Supreme Polystyrene pellets generally does not present unusual problems, a dust can be formed under some circumstances. Mechanical handling equipments can cause formation of dusts. Maintain good housekeeping. Store in a cool and dry place in a shade away from sunlight and heat.

The packing used by Supreme Petrochem Ltd. is not UV-stabilized and hence, should not be exposed to sunlight. This product contains no fire retardant additive. It is a COMBUSTIBLE and should be protected from flame and other high heat sources. Take precautionary measures against static discharges earth all storage tanks (silos). For more information, contact Supreme Petrochem Ltd. (0091 22 2673 6196-99)

### 8) Exposure Controls/Personal Protection :

#### Personal Protective Equipment :

**Respiratory Protection** : Not required under normal operating conditions. Under a typical conditions approved respirators should be used. (Refer also section 5)

**Skin Protection** : None under normal conditions, but use gloves if seemed necessary.

**Eye Protection** : ANSI approved safety glasses with side shields. Goggles would be required for heavy dusting.

**General Control Measures** : See adequate ventilation and provide electrostatic bonding and grounding of equipment to prevent dust explosion.

### 9) Physical and Chemical Properties :

**Form** Solid Pellets

**Colour** Opaque and natural white

**Odour** None

**Boiling point** N/A

**Melting point** Softens at 79 to 107

**Specific gravity (water = 1)** 1.08-1.17

**Solubility in other solvents** Soluble in chlorinated solvents, aromatic solvents and ketones

**Vapour pressure** N/A

**Volatiles (By Volume)** N/A

**Vapour Density (air = 1)** N/A

**Evaporation Rate** None

**Solubility in water** Insoluble

### 10) Stability and Reactivity :

**Stability (Conditions to avoid)** : Stable and inert in normal handling and storage conditions. Avoid processing of material above 300°C

**Incompatibility (Materials to avoid)** : Strong oxidizing agents.

**Hazardous Decomposition** : An increase in the emission of fumes such as hydroperoxide (TLV 3 ppm (10m<sup>3</sup>/m<sup>3</sup>) ceiling value), hydroperchloride (TLV 5 ppm (7m<sup>3</sup>/m<sup>3</sup>) ceiling value), when the FR IPS is processed at higher than normal temperatures or during incinerations of waste products.

**Hazardous Polymerization** : None

### 11) Toxicological Information :

Specific information on the preparation is not available.

#### 11.1) Dangerous Effects from Exposure to the Preparation:

The product's dusts may cause irritation to the eyes and/or respiratory or skin.

#### 11.2) Delayed and Immediate Effects from Short and Long Term Exposure:

carcinogenicity, mutagenicity, reproductive toxicity : no evidence of these effects has been reported for the preparation.

### 12) Ecological Information :

**Environmental Hazard** : Sewer / waterway obstruction, Fish may eat pellets and obstruct their digestive tracts.

**Spill, leak and release procedures** : Stop leakage, contain spill, obstruct exit to sewers, waterways, and sources of ignition. Collect into containers.

**Reportable quantity** : None (Not regulated)

### 13) Disposal Considerations :

#### 13.1) Appropriate Methods of Disposal :

Residues should be disposed off as required by national and local regulations.

#### 13.2) Recycling:

After suitable treatment (cleaning, grinding, etc.) the preparation can be safely re-used, as it is or mixed with fresh material, when this is compatible with the intended final application

#### 13.3) Incineration:

It must be done under approved conditions, possibly with energy recovery and only at suitable facilities equipped with a scrubber for the treatment of fumes before their release into the atmosphere.

#### 13.4) Land filling:

It should be avoided as far as possible. If unavoidable, use approved landfill silos.

### 14) Transport Information :

The preparation is not a D.O.T. "hazardous material".

### 15) Regulatory Information :

The preparation is not regulated by D.O.T. The preparation is not hazardous by OSHA hazardous communication Standard 29 CFR 1910.1200. The preparation is on the TSCA inventory. The preparation is not subject to specific ERLA reporting requirements. The preparation is not subject to SARA 313 reporting requirements. The preparation is not subject to California Safe Drinking Water and Toxic Enforcement Act (Proposition 65) reporting. The preparation is not dangerous according to the applicable E regulation. Label not required.

### 16) Other Information :

**Hazard Rating** : 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe

Health : 0, Fire : 1, Reactivity : 0

**Note** : To the best of our knowledge the information contained in this Material Safety Data Sheet is accurate. However, neither Supreme Petrochem Limited nor any of its Distributors makes any warranty, expressed or implied, or accepts any liability in connection with this information or its use.

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