

# Material Safety Data Sheet

According to EG 1907/2006



Date Updated: 25/05/2007

Version: 1.0

Page 1 of 4

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| <b>1. Identification of the substance and of the company</b>                                                                                                                                       |                                                                                   |
| Product name                                                                                                                                                                                       | Poly(styrene)                                                                     |
| <b>Manufacturer / supplier identification</b>                                                                                                                                                      |                                                                                   |
| Company                                                                                                                                                                                            | PSS Polymer Standards Service GmbH<br>In der Dalheimer Wiese 5<br>D - 55023 Mainz |
| Technical Phone                                                                                                                                                                                    | +49 6131 - 96239 - 0                                                              |
| Fax                                                                                                                                                                                                | +49 6131 - 96239 -11                                                              |
| Email                                                                                                                                                                                              | Info@polymer.de                                                                   |
| Emergency Phone                                                                                                                                                                                    | +49 6131 - 1924 - 0                                                               |
| <b>2. Composition / information on ingredients</b>                                                                                                                                                 |                                                                                   |
| CAS-No.:                                                                                                                                                                                           | 9003-53-6                                                                         |
| EG/EC No.:                                                                                                                                                                                         | 2028515                                                                           |
| Molecular formula:                                                                                                                                                                                 | $[\text{CH}_2\text{CH}(\text{C}_6\text{H}_5)]_n$                                  |
| <b>3. Hazards identification</b>                                                                                                                                                                   |                                                                                   |
| SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT<br>Not hazardous according to Directive 67/548/EEC.                                                                                    |                                                                                   |
| <b>4. First aid measures</b>                                                                                                                                                                       |                                                                                   |
| AFTER INHALATION<br>If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.                                                                                             |                                                                                   |
| AFTER SKIN CONTACT<br>In case of contact, immediately wash skin with soap and copious amounts of water.                                                                                            |                                                                                   |
| AFTER EYE CONTACT<br>In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician. |                                                                                   |
| AFTER INGESTION<br>If swallowed, wash out mouth with water provided person is conscious. Call a physician.                                                                                         |                                                                                   |
| <b>5. Fire fighting measures</b>                                                                                                                                                                   |                                                                                   |
| CONDITIONS OF FLAMMABILITY<br>Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air.                                                                    |                                                                                   |
| EXTINGUISHING MEDIA<br>Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.                                                                                            |                                                                                   |
| SPECIAL RISKS<br>Specific Hazard(s): Emits toxic fumes under fire conditions.                                                                                                                      |                                                                                   |
| SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS<br>Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.                                            |                                                                                   |
| <b>6. Accidental release measures</b>                                                                                                                                                              |                                                                                   |
| PROCEDURE(S) OF PERSONAL PRECAUTION(S)<br>Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.                                            |                                                                                   |

# Material Safety Data Sheet

According to EG 1907/2006

Product name: Poly(styrene)

Date Updated: 25/05/2007

Version: 1.0



Page 2 of 4

|                                                                                                                                                                                                                                                                                                                                                 |                                                                                       |
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| <b>METHODS FOR CLEANING UP</b><br>Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.                                                                                                                                                               |                                                                                       |
| <b>7. Handling and storage</b>                                                                                                                                                                                                                                                                                                                  |                                                                                       |
| <b>HANDLING</b><br>Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.                                                                                                                                                                                           |                                                                                       |
| <b>STORAGE</b><br>Conditions of storage: Keep tightly closed.                                                                                                                                                                                                                                                                                   |                                                                                       |
| <b>8. Exposure controls / personal protection</b>                                                                                                                                                                                                                                                                                               |                                                                                       |
| <b>ENGINEERING CONTROLS</b><br>Safety shower and eye bath. Mechanical exhaust required.                                                                                                                                                                                                                                                         |                                                                                       |
| <b>GENERAL HYGIENE MEASURES</b><br>Wash thoroughly after handling.                                                                                                                                                                                                                                                                              |                                                                                       |
| <b>PERSONAL PROTECTIVE EQUIPMENT</b><br>Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. |                                                                                       |
| <b>HAND PROTECTION</b><br>Protective gloves.                                                                                                                                                                                                                                                                                                    |                                                                                       |
| <b>EYE PROTECTION</b><br>Chemical safety goggles.                                                                                                                                                                                                                                                                                               |                                                                                       |
| <b>9. Physical and chemical properties</b>                                                                                                                                                                                                                                                                                                      |                                                                                       |
| Appearance                                                                                                                                                                                                                                                                                                                                      | Physical State: Solid / Fluid<br>Colour: White / Transparent<br>Form: Powder / Liquid |
| Property                                                                                                                                                                                                                                                                                                                                        | Value                                                                                 |
| pH                                                                                                                                                                                                                                                                                                                                              | N/A                                                                                   |
| BP/BP Range                                                                                                                                                                                                                                                                                                                                     | N/A                                                                                   |
| Mp/Mp Range                                                                                                                                                                                                                                                                                                                                     | N/A                                                                                   |
| Flash Point                                                                                                                                                                                                                                                                                                                                     | N/A                                                                                   |
| Flammability                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                   |
| Autoignition Temp.                                                                                                                                                                                                                                                                                                                              | N/A                                                                                   |
| Oxidizing Properties                                                                                                                                                                                                                                                                                                                            | N/A                                                                                   |
| Explosive Properties                                                                                                                                                                                                                                                                                                                            | N/A                                                                                   |
| Explosion Limits                                                                                                                                                                                                                                                                                                                                | N/A                                                                                   |
| Vapor Pressure                                                                                                                                                                                                                                                                                                                                  | N/A                                                                                   |
| SG/Density                                                                                                                                                                                                                                                                                                                                      | N/A                                                                                   |
| Partition Coefficient                                                                                                                                                                                                                                                                                                                           | N/A                                                                                   |
| Viscosity                                                                                                                                                                                                                                                                                                                                       | N/A                                                                                   |
| Vapor Density                                                                                                                                                                                                                                                                                                                                   | N/A                                                                                   |
| Saturated Vapor Conc.                                                                                                                                                                                                                                                                                                                           | N/A                                                                                   |
| Evaporation Rate                                                                                                                                                                                                                                                                                                                                | N/A                                                                                   |
| Bulk Density                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                   |
| Decomposition Temp.                                                                                                                                                                                                                                                                                                                             | N/A                                                                                   |

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| Solvent Content                                                                                                                                                                                                                                                                            | N/A                       |
| Water Content                                                                                                                                                                                                                                                                              | N/A                       |
| Surface Tension                                                                                                                                                                                                                                                                            | N/A                       |
| Conductivity                                                                                                                                                                                                                                                                               | N/A                       |
| Miscellaneous Data                                                                                                                                                                                                                                                                         | N/A                       |
| Solubility in Water:                                                                                                                                                                                                                                                                       | Insoluble                 |
| Solubility: Solvent                                                                                                                                                                                                                                                                        | Toluene, Tetrahydrofurane |
| <b>10. Stability and reactivity</b>                                                                                                                                                                                                                                                        |                           |
| STABILITY                                                                                                                                                                                                                                                                                  |                           |
| Stable: Stable                                                                                                                                                                                                                                                                             |                           |
| Materials to Avoid: Strong oxidizing agents.                                                                                                                                                                                                                                               |                           |
| HAZARDOUS DECOMPOSITION PRODUCTS                                                                                                                                                                                                                                                           |                           |
| Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.                                                                                                                                                                                                                         |                           |
| HAZARDOUS POLYMERIZATION                                                                                                                                                                                                                                                                   |                           |
| Will not occur.                                                                                                                                                                                                                                                                            |                           |
| <b>11. Toxicological information</b>                                                                                                                                                                                                                                                       |                           |
| RTECS NUMBER: WL6475000                                                                                                                                                                                                                                                                    |                           |
| SIGNS AND SYMPTOMS OF EXPOSURE                                                                                                                                                                                                                                                             |                           |
| To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.                                                                                                                                                                  |                           |
| ROUTE OF EXPOSURE                                                                                                                                                                                                                                                                          |                           |
| Skin contact: May cause skin irritation.                                                                                                                                                                                                                                                   |                           |
| Skin Absorption: May be harmful if absorbed through the skin.                                                                                                                                                                                                                              |                           |
| Eye Contact: May cause eye irritation.                                                                                                                                                                                                                                                     |                           |
| Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.                                                                                                                                                                         |                           |
| Ingestion: May be harmful if swallowed.                                                                                                                                                                                                                                                    |                           |
| CHRONIC EXPOSURE - CARCINOGEN                                                                                                                                                                                                                                                              |                           |
| Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.                                                                                                                                   |                           |
| Rat                                                                                                                                                                                                                                                                                        |                           |
| Route of Application: Implant                                                                                                                                                                                                                                                              |                           |
| Result: Tumorigenic: Tumors at site or application                                                                                                                                                                                                                                         |                           |
| Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.                                                                                                                                                                                                                                |                           |
| IARC CARCINOGEN LIST                                                                                                                                                                                                                                                                       |                           |
| Rating: Group 3                                                                                                                                                                                                                                                                            |                           |
| <b>12. Ecological information</b>                                                                                                                                                                                                                                                          |                           |
| No data available                                                                                                                                                                                                                                                                          |                           |
| <b>13. Disposal considerations</b>                                                                                                                                                                                                                                                         |                           |
| SUBSTANCE DISPOSAL                                                                                                                                                                                                                                                                         |                           |
| Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. |                           |
| <b>14. Transport information</b>                                                                                                                                                                                                                                                           |                           |
| RID/ADR                                                                                                                                                                                                                                                                                    |                           |
| Non-hazardous for road transport.                                                                                                                                                                                                                                                          |                           |

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According to EG 1907/2006

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Version: 1.0



Page 4 of 4

## IMDG

Non-hazardous for sea transport.

## IATA

Non-hazardous for air transport.

## 15. Regulatory information

Not hazardous according to Directive 67/548/EEC.

Caution: Substance not yet fully tested (EU).

### COUNTRY SPECIFIC INFORMATION

Germany

WGK: 3

Self-Classification

## 16. Other information

### WARRANTY

The information in this document is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. PSS GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.

### DISCLAIMER

For R&D use only. Not for drug, household or other uses.