

## 1. Identification of the substance and of the company

### 1.1 Product identifiers

Product name Polystyrene standard

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals, Manufacture of substances  
PSS-PSVAL - EasyValid Validation Kit organic, 6 x 5 Vials, 1.5 ml  
PSS-PSKITR10HT - ReadyCal-Kit Polystyrene for HT GPC, pre-weighted calibration kit, nominal Mp 260 - 12000000 g/mol, 4 x 5 Vials, 10ml  
PSS-PSKITR1HT - ReadyCal-Kit Polystyrene for HT GPC, pre-weighted calibration kit, nominal Mp 400 - 2500000 g/mol, 3 x 10 Vials, 1.5ml  
PSS-PSKITR1 - ReadyCal-Kit Polystyrene, nominal Mp 470 - 2500000 g/mol, 3 x 10 Vials, 1.5ml  
PSS-PSKITR1H - ReadyCal-Kit Polystyrene high, pre-weighted calibration kit, nominal Mp 1600 - 7500000 g/mol, 3 x 10 Vials, 1.5ml  
PSS-PSKITR1L - ReadyCal-Kit Polystyrene low, pre-weighted calibration kit, nominal Mp 260 - 66000 g/mol, 3 x 10 Vials, 1.5ml  
PSS-PSKITR4 - ReadyCal-Kit Polystyrene, pre-weighted calibration kit, nominal Mp 470 - 2500000 g/mol, 3 x 10 Vials, 4ml  
PSS-PSKITR4H - ReadyCal-Kit Polystyrene high, pre-weighted calibration kit, nominal Mp 1600 - 7500000 g/mol, 3 x 10 Vials, 4ml  
PSS-PSKIT4L - ReadyCal-Kit Polystyrene low, pre-weighted calibration kit, nominal Mp 260 - 66,000 g/mol, 3 x 10 Vials, 4ml

### 1.3 Details of the supplier of the safety data sheet

Company PSS Polymer Standards Service GmbH  
In der Dalheimer Wiese 5  
D - 55120 Mainz

Technical phone +49 6131 - 96239 - 0  
Fax +49 6131 - 96239 -11  
Email sds@pss-polymer.com

### 1.4 Emergency telephone number

24-hour emergency contact number: +1 872 5888271 (PSS)

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## 2. Hazards identification

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.  
This substance is not classified as dangerous according to Directive 67/548/EEC.

### 2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

### 2.3 Other hazards

none

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## 3. Composition / information on ingredients

### 3.1 Substances

Synonyms: PS  
Formula:  $[\text{CH}_2\text{CH}(\text{C}_6\text{H}_5)]_n$   
CAS-No.: 9003-53-6  
EC No.: 2028515

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## 4. First aid measures

### 4.1 Description of first aid measures

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Product name: Poly(styrene)  
Date Updated: 2023-01-20  
Version: 1.8

#### **In case of skin contact**

Wash off with soap and plenty of water.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### **4.2 Most important symptoms and effects, both acute and delayed**

#### **4.3 Indication of any immediate medical attention and special treatment needed**

no data available

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### **5. Fire fighting measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides.

#### **5.3 Advice for fire fighters**

Wear self-contained breathing apparatus for fire fighting if necessary.

#### **5.4 Further information**

no data available

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### **6. Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapors, mist or gas.

#### **6.2 Environmental precautions**

Do not let product enter drains.

#### **6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### **6.4 Reference to other sections**

For disposal see section 13.

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### **7. Handling and storage**

#### **7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

#### **7.3 Specific end use(s)**

no data available

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### **8. Exposure controls / personal protection**

#### **8.1 Control parameters**

Components with workplace control parameters

#### **8.2 Exposure controls**

##### **Appropriate engineering controls**

General industrial hygiene practice.

##### **Personal protective equipment**

###### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

###### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and

the standard EN 374 derived from it.

### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	Form: liquid, viscous to solid (depending on the molar mass)
Odour	no data available
Odour Threshold	no data available
pH	no data available
Melting point/freezing point	no data available
Initial boiling point and boiling range	no data available
Flash Point	no data available
Evaporation rate	no data available
Flammability	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	no data available
Water solubility	insoluble
Partition coefficient: n- Octanol/Water	no data available
Auto ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available

### 9.2 Other safety information

no data available

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## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

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## 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitisation

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

Carcinogenicity - rat - Implant

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Benzene, ethenyl-, homopolymer)

#### Reproductive toxicity

no data available

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

#### Additional Information

RTECS: Not available

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## 12. Ecological information

### 12.1 Toxicity

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Results of PBT and vPvB assessment

no data available

### 12.6 Other adverse effects

no data available

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### **13. Disposal considerations**

#### **13.1 Waste treatment methods**

##### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

##### **Contaminated packaging**

Dispose of as unused product.

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### **14. Transport information**

#### **14.1 UN number**

ADR/RID: -                                                  IMDG: -                                                  IATA: -

#### **14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

#### **14.3 Transport hazard class(es)**

ADR/RID: -                                                  IMDG: -                                                  IATA: -

#### **14.4 Packaging group**

ADR/RID: -                                                  IMDG: -                                                  IATA: -

#### **14.5 Environmental hazards**

ADR/RID: no                                                  IMDG Marine pollutant: no                          IATA: no

#### **14.6 Special precautions for user**

##### **Further information**

no data available

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### **15. Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

#### **15.2 Chemical Safety Assessment**

no data available

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### **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.