Kit Name: Kit Polystyrene sulfonate sodium salt, calibration kit, nominal Mp 900 - 1,000,000 g/mol, 10 x 0.5g

Kit PN: PSS-PSSKIT

This product is a kit, composed of the following individual chemical components:

Kit Components

PSS Component Part Number	Component Name	Volume or mass/ container and unit	No. of component containers/ kit
PSS-pss1k	Poly(styrene sulfonate) sodium salt nominal Mw: 1000 g/mol, 500 mg	0.5 g	1
PSS-pss2k	Poly(styrene sulfonate) sodium salt nominal Mw: 2000 g/mol, 500 mg	0.5 g	1
PSS-pss3.4k	Poly(styrene sulfonate) sodium salt nominal Mw: 3400 g/mol, 500 mg	0.5 g	1
PSS-pss10k	Poly(styrene sulfonate) sodium salt nominal Mw: 10000 g/mol, 500 mg	0.5 g	1
PSS-pss30k	Poly(styrene sulfonate) sodium salt nominal Mw: 30000 g/mol, 500 mg	0.5 g	1
PSS-pss67k	Poly(styrene sulfonate) sodium salt nominal Mw: 67000 g/mol, 500 mg	0.5 g	1
PSS-pss140k	Poly(styrene sulfonate) sodium salt nominal Mw: 140000 g/mol, 500 mg	0.5 g	1
PSS-pss280k	Poly(styrene sulfonate) sodium salt nominal Mw: 280000 g/mol, 500 mg	0.5 g	1
PSS-pss450k	Poly(styrene sulfonate) sodium salt nominal Mw: 450000 g/mol, 500 mg	0.5 g	1
PSS-pss1m	Poly(styrene sulfonate) sodium salt nominal Mw: 1000000 g/mol, 500 mg	0.5 g	1

Applicable SDS/s for each component follow this cover sheet.

1. Identification of the substance and of the company

1.1 Product identifiers

Product name Polystyrene sulfonate sodium salt standard

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

Identified uses Laboratory chemicals, Manufacture of substances

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)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute toxicity, Inhalation (Category 4)
Classification according to EU Directives 67/548/EEC or 1999/45/EC
Harmful by inhalation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]
Pictogram

Signal word Warning
Hazard statement(s)
H332 Harmful if inhaled.

Precautionary statement(s) none
Supplemental Hazard Statements none
Caution - substance not yet tested completely.

2.3 Other hazards

none

3. Composition / information on ingredients

3.1 Substances

Synonyms: PSS
Formula: $[CH_2CH(C_6H_4SO_3)Na]_n$
CAS-No.: 9080-79-9

4. First aid measures

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

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. Consult a physician.

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

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, Sulphur oxides, Sodium oxides

5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

no data available

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, Closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. 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

8. Exposure controls / personal protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 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

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Form: solid
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	no data available
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

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

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat - > 8.000 mg/kg
LC50 Inhalation - rat - 4 h - 2.600 mg/m3
Remarks: Lungs, Thorax, or Respiration: Respiratory obstruction.

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

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.

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: DB6836000

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

13. Disposal considerations

13.1 Waste treatment methods

Product

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

Contaminated packaging

Dispose of as unused product.

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

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

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.