



**Kit Name:** Kit Pullulan, calibration kit, nominal Mp 340 - 700,000 g/mol, 10 x 0.1 g

**Kit PN:** PSS-PULKIT

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-pul342	Pullulan nominal Mw: 342 g/mol, 100 mg	0.1 g	1
PSS-pul1.3k	Pullulan nominal Mw: 1300 g/mol, 100 mg	0.1 g	1
PSS-pul6k	Pullulan nominal Mw: 6000 g/mol, 100 mg	0.1 g	1
PSS-pul10k	Pullulan nominal Mw: 10000 g/mol, 100 mg	0.1 g	1
PSS-pul22k	Pullulan nominal Mw: 22000 g/mol, 100 mg	0.1 g	1
PSS-pul50k	Pullulan nominal Mw: 50000 g/mol, 100 mg	0.1 g	1
PSS-pul110k	Pullulan nominal Mw: 110000 g/mol, 100 mg	0.1 g	1
PSS-pul200k	Pullulan nominal Mw: 200000 g/mol, 100 mg	0.1 g	1
PSS-pul400k	Pullulan nominal Mw: 400000 g/mol, 100 mg	0.1 g	1
PSS-pul800k	Pullulan nominal Mw: 800000 g/mol, 100 mg	0.1 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 Pullulan 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)

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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: PUL  
Formula:  $[C_{18}H_{30}O_{15}]_n$   
CAS-No.: 9057-02-7  
EC-No.: 232-945-1

No components need to be disclosed according to the applicable regulations.

## 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.

#### 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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 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

Nature of decomposition products not known.

### 5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting 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)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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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 workplace. 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: 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

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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**

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.

## **Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **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.

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