Printing date 05/03/2018 Reviewed on 02/23/2015

1 Identification

· Product identifier

· Trade name: PEFABLOC® SC

· Article number: 31682

• CAS Number: 30827-99-7

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

SERVA Electrophoresis GmbH

Carl-Benz-Str. 7 D-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-10 msds.info@serva.de

· Information department: Product Safety department Tel.: +49 6221 13840-35

· Emergency telephone number:

Medical Emergency Information in case of poisoning:

Poison Information Center Mainz - Phone: +49 (0) 6131 19240

(advisory service in German or English language)

2 Hazard(s) identification

· Classification of the substance or mixture



Skin Corr. 1B H314 Causes severe skin burns and eye damage.

- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS05
- · Signal word Danger
- · Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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Safety Data Sheet acc. to OSHA HCS

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· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 1 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1
 Fire = 0
 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: PBT assessment not available.
- · vPvB: vPvB assessment not available.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

30827-99-7 4-(2-Aminoethyl)-benzene sulfonyl fluoride hydrochloride;

PEFABLOC® SC

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

· After swallowing:

Wash out mouth. Seek medical advice if discomfort occurs.

Do not induce vomiting!

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO₂ extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon monoxide and carbon dioxide

Sulphur oxides (SOx)

Hydrogen chloride (HCl)

Hydrogen fluoride (HF)

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- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

Avoid formation of dust.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store at +2 to +8 $^{\circ}C$
- · Information about storage in one common storage facility: Store away from oxidizing agents.
- · Further information about storage conditions:

Keep receptacle tightly sealed and store in dry conditions.

Protect from direct sunlight.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment:

Short term filter device:

Filter P2

· Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Natural rubber, NR Nitrile rubber, NBR

- · Eye protection: Tightly sealed goggles
- · Body protection: Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Powder
Color: White
Odor: Odorless

· Change in condition

Melting point/Melting range: 175-177 °C (347-351 °F)

Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Danger of explosion: Product does not present an explosion hazard.

· **Density:** Not determined.

· Solubility in / Miscibility with

Water at 20 °C (68 °F): 200 g/l

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant informations available
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No further relevant informations available.
- · Conditions to avoid moisture
- · Incompatible materials: Avoid contact with: strong oxidizers, strong bases
- · Hazardous decomposition products: In case of fire: See Section 5

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Causes serious eye damage.
- · Sensitization: No sensitizing effects known.
- · Other information (about experimental toxicology):

To the best of our knowledge this material has not been thoroughly investigated.

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- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow product to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Disposal must be made according to official regulations.
- · Uncleaned packagings:
- · Recommendation:

Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

| · UN-Number | |
|---------------------------|--|
| · DOT, ADR, IMDG, IATA | UN3261 |
| · UN proper shipping name | |
| DOT | Corrosive solid, acidic, organic, n.o.s. (4-(2-Aminoethyl) |
| | benzene sulfonyl fluoride hydrochloride) |
| · ADR | 3261 Corrosive solid, acidic, organic, n.o.s. (4-(2-Aminoethyl |
| | benzene sulfonyl fluoride hydrochloride) |
| · IMDG | CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. |
| | $(PEFABLOC \otimes SC)$ |
| · IATA | Corrosive solid, acidic, organic, n.o.s. (PEFABLOC® SC) |

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| | (Contd. of page |
|---|---|
| Transport hazard class(es) | |
| DOT | |
| CORROSIVE | |
| Class | 8 Corrosive substances |
| Label | 8 |
| · ADR, IMDG, IATA | |
| 8 | |
| · Class | 8 Corrosive substances |
| Label | 8 |
| Packing group DOT, ADR, IMDG, IATA | II |
| Environmental hazards: | |
| · Environmentat nazaras. · Marine pollutant: | No |
| Special precautions for user | Warning: Corrosive substances |
| Danger code (Kemler): | 80 |
| EMS Number: | F- A , S - B |
| Segregation groups | Acids |
| Transport in bulk according to Annex | |
| MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| · ADR | |
| Excepted quantities (EQ) | Code: E2 |
| | Maximum net quantity per inner packaging: 30 g |
| | Maximum net quantity per outer packaging: 500 g |
| · IMDG | 1.1 |
| · Limited quantities (LQ) | 1 kg |
| · Excepted quantities (EQ) | Code: E2 Maximum net quantity per inner packaging: 30 g |
| | Maximum net quantity per outer packaging: 50 g Maximum net quantity per outer packaging: 500 g |
| · UN ''Model Regulation'': | UN3261, Corrosive solid, acidic, organic, n.o.s. (4-(2 |
| or mountagnation. | Aminoethyl)-benzene sulfonyl fluoride hydrochloride), 8, II |

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): Substance is not listed.
- · Proposition 65 Substance is not listed.
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.

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- · Cancerogenity categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- · TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS05
- · Signal word Danger
- · Hazard statements

Causes severe skin burns and eye damage.

· Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department
- · Contact: +49 6221 13840-35
- · Date of preparation / last revision 05/03/2018 / 3
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

PBT: persistent, bioaccumulative, toxic substance (REACH)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

* Data compared to the previous version altered.