

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	Pefabloc® SC
Article number	399-01
CAS number	30827-99-7

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

Application of the substance / the mixture Diagnostic reagent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier	DSM Nutritional Products Ltd Branch Pentapharm Dornacherstrasse 112 CH- 4147 Aesch BL / Switzerland Phone +41 61 706 48 48 Fax +41 61 706 48 00
Further information obtainable from	pentapharm@pentapharm.com

1.4 Emergency telephone number

Tox Info Suisse: +41 44 251 51 51 (24h; 7 days a week)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



corrosion

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



Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05



GHS07

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

Signal word

Danger

Hazard-determining components of labelling

4-(2-Aminoethyl)-benzensulfonylfluorid

Hazard statements

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

Precautionary statements

P261 Do not breathe dust.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

2.3 Other hazards

As a potent enzyme inhibitor, this compound should not come in contact with wounds. This compound shall not be inhaled, ingested or get in contact with eyes. Pefabloc® SC is not volatile. Due to a melting point of approx. 175 °C, no volatile components are expected under normal conditions. Decomposition with moisture and/or water.

Results of PBT and vPvB assessment

PBT: According to current knowledge, the product contains no PBT substance.

vPvB: According to current knowledge, the product contains no vPvB substance.

3 Composition/information on ingredients

3.2 Chemical characterization: Substances

CAS No.

30827-99-7

Description

4-(2-Aminoethyl)-benzensulfonylfluorid

SVHC

According to current knowledge no SVHC contained.

4 First aid measures

4.1 Description of first aid measures

General information

Immediately remove any clothing soiled by the product.

After inhalation

Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

After skin contact

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

After eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

After swallowing

Do NOT induce vomiting.

Rinse mouth thoroughly. If affected person is unconscious do not put anything in the mouth.

Immediately call a POISON CENTRE or doctor.

4.2 Most importance symptoms and effects, both acute and delayed

The substance is a potent enzyme inhibitor.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO₂, foam, dry powder, or water.

5.2 Specific hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

Carbon oxides (CO and CO₂)

Nitrogen oxides (NO_x)

Sulfur oxides (SO_x)

Hydrogen chloride (HCl).

Hydrogen fluoride (HF)

5.3 Advice for firefighters

Protective equipment

Wear self-contained respiratory protective device.

Wear protective clothing to prevent contact with skin and eyes.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact and particle inhalation.

Mount respiratory protective device.

6.2 Environmental precautions

Do not allow to enter sewers / surface or ground water.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Collect in suitable containers.

Clean the affected area carefully and ensure adequate ventilation.

Avoid dust formation.

6.4 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

7.1 Precautions for safe handling

Thorough dedusting.

Avoid skin and eye contact and particle inhalation.

Wash contaminated clothing before reuse.

Information about fire - and explosion protection

Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles

No special requirements.

Information about storage in one common storage facility

Not required.

Further information about storage conditions

Store the product in a dry place protected from light at a temperature between +2 to +8°C.

Store under argon.

Protect from heat and direct sunlight.

Protect from humidity and water.

7.3 Specific end use(s)

No further relevant information available.

8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace

Not required.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

Additional Occupational Exposure Limit Values for possible hazards during processing

OEL Pefabloc® SC = 56 µg/m³, Time Weighted Average 8 h, skin notation; Health Hazard band (HHB)3

Acceptable Surface Limit (ASL, wipe test criterion): based on the OEL, an acceptable daily dose = 560 µg/day.

ASL Pefabloc® SC = 31 µg/100 cm².

Additional information

The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Ensure good ventilation/exhaustion at the workplace.

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Respiratory protection

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P3

Respiratory protection must be compliant with the specifications of Directive 89/686/EEC and be in accordance with the EN standards resulting thereof.

Protection of hands



Protective gloves

Material of gloves

Protective gloves must be compliant with the specifications of EU Directive 89/686/EEC and be in accordance with the standard EN374. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection



Safety glasses

Face protection

Protective goggles must be compliant with the specifications of Directive 89/686 / EEC and be in accordance with the standard EN166.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

Limitation and supervision of exposure into the environment

Do not allow to enter sewers/ surface or ground water.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Appearance	
Form	Crystalline powder
Colour	White to off-white
Odour	Odourless
Odour threshold	Not determined.
pH-value	Not applicable.
Change in condition	
Melting point/Melting range	175 - 185 °C
Boiling point/Boiling range	Not determined.
Flash point	Not determined.
Flammability (solid, gaseous)	Product is not flammable.
Ignition temperature	
Decomposition temperature	Not determined.
Auto-ignition temperature	Not determined.
Explosive properties	Product does not present an explosion hazard.
Explosion limits	
Lower	Not determined.
Upper	Not determined.
Oxidising properties	Not determined.
Vapour pressure	Not applicable.
Density	
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water	Completely soluble.
Partition coefficient (n-octanol/water)	Not applicable.
Viscosity	
Dynamic	Not applicable.
Kinematic	Not applicable.
Solvent content	
VOC (EC)	Not determined.
VOCV (CH)	Not determined.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

9.2 Other information

No further relevant information available.

10 Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

No decomposition if used according to specifications.

Thermal decomposition / conditions to be avoided

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

Avoid humidity.

Avoid heat.

10.5 Incompatible materials

Strong acids and strong bases.

Oxidizing agents.

10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide

Nitrogen oxides (NO_x)

Sulphur oxides (SO_x)

Hydrogen chloride (HCl)

Hydrogen fluoride.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes severe skin burns and eye damage.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

PEFABLOC® SC

399-01

Other information

As a potent enzyme inhibitor, this compound should not come in contact with wounds. This compound shall not be inhaled, ingested or get in contact with eyes. Pefabloc® SC is not volatile. Due to a melting point of approx. 175 °C, no volatile components are expected under normal conditions. Decomposition with moisture and/or water.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met..

12 Ecological information

12.1 Toxicity

Aquatic toxicity

Based on the ingredients not classified as harmful for the environment.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information

General notes: Must not reach sewage water or drainage ditch undiluted or unneutralized.

12.5 Results of PBT and vPvB assessment

PBT

According to current knowledge, the product contains no PBT substance.

vPvB

According to current knowledge, the product contains no vPvB substance.

12.6 Other adverse effects

No further relevant information available.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

13 Disposal considerations

13.1 Waste treatment methods

Recommendation: Disposal must be made according to official regulations.

European waste catalogue (The Swiss waste code is identical). In Switzerland codes for hazardous waste are marked with an „S“ („Sonderabfall“) instead of an asterisk.

18 00 00	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 01 00	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 06*	chemicals consisting of or containing dangerous substances

* = hazardous waste

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

14 Transport information

14.1 UN-number

ADR, ADN, IMDG, IATA

UN3261

14.2 UN Proper shipping name

ADR, ADN

3261 CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
(4-(2-Aminoethyl)-benzensulfonylfluorid)

IMDG, IATA

CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
(4-(2-Aminoethyl)-benzensulfonylfluorid)

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA



Class

8 Corrosive substances

Label

8

14.4 Packing group

ADR, ADN, IMDG, IATA

II

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Warning: Corrosive substances.

Danger code (Kemler)

80

EMS Number

F-8, S-B

Segregation groups

Acids

Stowage Category

B

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

Transport additional information

ADR/ADN

Limited quantities (LQ)

1kg

Expected quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

Transport category

2

Tunnel restriction code

E

IMGD

Limited quantities (LQ)

1L

Expected quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

UN "Model Regulation"

UN 3261 CORROSIVE SOLID, ACIDIC, ORGANIC,

N.O.S.

(4-(2-AMINOETHYL) ENZENSULFONYLFLUORID), 8, II

15 Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I

Substance is listed.

National regulations

Waterhazard class

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

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31



PEFABLOC® SC

399-01

16 Other information

All information and instructions provided in this Safety Data Sheet are based on the current state of scientific and technical knowledge at the date indicated on this Safety Data Sheet. DSM Nutritional Products Ltd Branch Pentapharm shall not be held responsible for any defect in the product covered by this Safety Data Sheet, should the existence of such a defect not be detectable considering the current state of scientific and technical knowledge.

Abbreviations and acronyms

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B