

Broeste Salt Tablets

Pure dried vacuum salt

Nature of Product:	Totally soluble PDV salt tablets			
Chemical Analysis:	typ.	min.	max.	Methods
• Sodium chloride	[%]	99.8		ASTM E 534-08
• Sulphate	[%]		0.15	ISO 2480
• H ₂ O-insoluble	[%]		0.02	ISO 2479
• Moisture	[%]		0.1	ISO 2483

Physical Properties:

- Bulk Density ca. 1,000 kg/m³ EN 1236

Dimensions:

- Diameter: 25 mm

Granulometry:

- Fines < 5,0 mm max. 4,0 % Method: EN 1235

Note:

- This product meets the requirements of EN 973 for regenerating salt for ion exchangers.
- The tablets are produced from refined food grade salt which complies with the purity criterion of the Codex Alimentarius.
- EN 973: Chemicals used for treatment of water intended for human consumption - Sodium chloride for regeneration of ion exchangers.

Field of application:

- For industrial and domestic uses.
- The tablets are specially produced to obtain a brine for regeneration of ion exchange resins in water softeners.

Production process:

- The tablets are obtained by ultra high mechanical pressure, without anticaking.

Storage:

- Handling and storage should be ensured under proper hygiene and preservation conditions so as to exclude any risk of contamination. Do not stack up more than 3 pallets.

Safety:

- A safety data sheet on SODIUM CHLORIDE can be obtained from on request. Sodium chloride is exempt from the REACH registration requirement because it is a natural mineral.

The data given above are based on our continuous quality monitoring system. They do not exempt the user from his obligation to make an incoming inspection of the delivered product. The data are for information purposes and do not constitute any guarantee. It is the responsibility of the user to determine the product's suitability for his intended use.

Broeste Salt Tablets

Pure dried vacuum salt

Packaging:

- 10-kg-PE-bags on pallet
- 25-kg-PE-bags on pallet

The data given above are based on our continuous quality monitoring system. They do not exempt the user from his obligation to make an incoming inspection of the delivered product. The data are for information purposes and do not constitute any guarantee. It is the responsibility of the user to determine the product's suitability for his intended use.

K+S Minerals and Agriculture GmbH

Bertha-von-Suttner-Str. 7 · 34131 Kassel · Germany
+49 561 9301-0 · info@k-plus-s.com · www.kpluss.com

A K+S Company





Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Revision date: 14-03-2024 Supersedes version of: 13-12-2021 Version: 5.0

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

1.1. Product identifier

Product form	: Substance
Substance name	: Brøste Expo Salt Tablets
Chemical name	: Sodium chloride
EC-No.	: 231-598-3
CAS-No.	: 7647-14-5
Product code	: 100117
Type of product	: Water softeners
Formula	: NaCl
Product group	: End product

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

1.2.1. Relevant identified uses

Use of the substance/mixture	: Water softeners
Function or use category	: Industrial use, Domestic use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

AZELIS
Posthofbrug 12, box 6
B-2600 Antwerp
Belgium
E-mail: sds@azelis.com
Website: www.azelis.com

*The address above is the Corporate Headquarters of Azelis and this SDS was prepared at their request on behalf of all Azelis entities

1.4. Emergency telephone number

Emergency number	: CareChem 24x7 : EUROPE: +44 1235 239670 USA: +1 202 464 2554 CANADA - +1 800 579 7421 (Toll Free) ASIA - +65 3158 1074 MOROCCO - +44 1235 239671 REST OF THE WORLD - +44 1865 407333 (English only)
------------------	--

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

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

No labelling applicable

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	Conc. %	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium chloride	CAS-No.: 7647-14-5 EC-No.: 231-598-3	> 98	Not classified

Comments : Listed in Annex V REACH, exempted from registration.

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after ingestion : On ingestion in large quantities: Nausea. Vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing agent suitable for surrounding fire.
Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not combustible.
Explosion hazard : Product is not explosive.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Hydrogen chloride.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.
Measures in case of dust release : Avoid dust formation.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Avoid sub-soil penetration. Do not allow into drains or water courses.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Flush contaminated areas with plenty of water.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust. Avoid dust formation.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool. Protect from moisture. Store in a dry place.
Store at ambient temperature.
Incompatible materials : Oxidizing agent. Alkali metals. Acids.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.1.4. DNEL and PNEC

Sodium chloride (7647-14-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	295.52 mg/kg bw/day
Acute - systemic effects, inhalation	2068.62 mg/m ³
Long-term - systemic effects, dermal	295.52 mg/kg bw/day
Long-term - systemic effects, inhalation	2068.62 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	126.65 mg/kg bw/day
Acute - systemic effects, inhalation	443.28 mg/m ³
Acute - systemic effects, oral	126.65 mg/kg bw/day
Long-term - systemic effects, oral	126.65 mg/kg bw/day
Long-term - systemic effects, inhalation	443.28 mg/m ³
Long-term - systemic effects, dermal	126.65 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	5 mg/l
PNEC (Soil)	
PNEC soil	4.86 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	500 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Protective goggles. Protective clothing. Dust formation: dust mask.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Where excessive dust may result, wear goggles

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Dust formation: dust mask. EN 143

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Colourless-white.
Appearance	: Crystals.
Molecular mass	: 58.44 g/mol
Odour	: odourless.
Odour threshold	: Not available
Melting point	: 801 °C (1013 hPa)
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing.
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 804 °C
pH	: 6 – 9
pH solution concentration	: 50 g/l (20°C, DIN 38404-5)
Viscosity, kinematic	: Not applicable
Solubility	: Soluble in water. Water: 35.9 g/100ml (20°C)
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 2160 kg/m ³ (25 °C)
Relative density	: 2.16 (25°C)
Relative vapour density at 20°C	: Not applicable
Particle size	: 1.293 mm (D50, CIPAC MT 59.1)

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Bulk density	: ≈ 1000 kg/m ³
Other properties	: Hygroscopic

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 10: Stability and reactivity

10.1. Reactivity

Hygroscopic product.

10.2. Chemical stability

Hygroscopic product.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent. Alkali metals. Acids.

10.6. Hazardous decomposition products

Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Sodium chloride (7647-14-5)	
LD50 oral rat	> 3980 mg/kg bodyweight (20 % Aqueous solution)
LD50 dermal rabbit	> 10000 mg/kg
LC50 Inhalation - Rat	> 42 mg/l (1 h, 20 % Aqueous solution, male, Aerosols)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 6 – 9
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 6 – 9
Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Sodium chloride (7647-14-5)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : No additional information available

11.2.2. Other information

No additional information available

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified. (Based on available data, the classification criteria are not met)

Sodium chloride (7647-14-5)

LC50 - Fish [1]	5840 mg/l (96 h, Lepomis macrochirus, Flow-through system, Fresh water, ASTM)
-----------------	---

12.2. Persistence and degradability

Sodium chloride (7647-14-5)

Persistence and degradability	Not applicable for inorganic substances.
-------------------------------	--

12.3. Bioaccumulative potential

Sodium chloride (7647-14-5)

Bioaccumulative potential	No bioaccumulation.
---------------------------	---------------------

12.4. Mobility in soil

Sodium chloride (7647-14-5)

Surface tension	73.03 mN/m (23 °C, 14.5 g/l)
-----------------	------------------------------

12.5. Results of PBT and vPvB assessment

Sodium chloride (7647-14-5)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties	: No additional information available.
--	--

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not discharge into drains or the environment.
Product/Packaging disposal recommendations	: Do not re-use empty containers without proper cleaning or reconditioning.
European List of Waste (LoW, EC 2000/532)	: 06 03 14 - solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Seveso Directive (Disaster Risk Reduction)

Seveso Additional information : Not applicable

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
1.1	Type of product	Added	
1.1	Product group	Added	
1.1	Name	Modified	
1.2	Function or use category	Added	
1.2	Use of the substance/mixture	Modified	
3.1	Substance type	Added	
9.1	Colour	Modified	
9.1	Particle size	Added	
9.1	Oxidising properties	Added	
9.1	Explosive properties	Added	
9.1	Solubility	Added	
9.1	Solubility in water	Modified	
9.1	Density	Modified	
9.1	Relative density	Added	
9.1	Decomposition temperature	Added	
9.1	Melting point	Modified	
9.1	Concentration of the solution used for the pH measurement	Added	
9.1	Appearance	Modified	
9.2	Bulk density	Modified	
9.2	Other properties	Added	
11.1	LD50 dermal rabbit	Added	
11.1	LC50 Inhalation - Rat	Added	
11.1	LD50 oral rat	Modified	
12.1	LC50 fish 1	Modified	
12.3	Bioaccumulative potential	Modified	

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Indication of changes			
Section	Changed item	Change	Comments
12.4	Surface tension	Added	
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added	
15.2	Chemical safety assessment	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number

Brøste Expo Salt Tablets

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:

N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.