

Road salt

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

1.1 Product identifier

Commercial name: Road salt
Registration number: Sodium chloride – the registration number of this substance is not available because the substance is exempted from registration according to Article 2, paragraph 7 point. b) of the Regulation (EC) No. 1907/2006 of the European Parliament and of the Council.

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

Profession application: spreading material for the winter maintenance of sidewalks and roads to release compacted snow and icy ground, effective to the temperature approx. - 5°C

1.3 Details of the supplier of the safety data sheet

Producer/importer: **Vodní sklo, a. s.**, Krakovská 1346/15, 110 01 Praha 1 – Nové Město
Address: Dornych 47, 656 16 Brno; U Tonasa 172/2, 403 31 Ústí nad Labem
IČ 279 21 662
Telephone number: +420 530 530 000 (Brno), +420 475 245 362, +420 475 245 233 (Ústí)
Fax number:: +420 530 530 002 (Brno), +420 475 507 164 (Ústí)
Competent person responsible for the SDS: Ing. Andrea Kudrová e-mail: andrea.kudrova@vodnisklo.cz

1.4 Emergency telephone number

Toxikologické informační středisko (Poison center), Na Bojišti 1, 120 00 Praha 2;
Telephone number (24 hours/day) +420 224 919 293; +420 224 915 402

2. Hazards identification

2.1 Classification of the substance or mixture

According to the Regulation (EC) No. 1272/2008: The substance is not classified as hazardous.
The human health and environmental hazards: The substance is not classified as hazardous.
Big amount of NaCl may have adverse effects on the environment.
Full text of the P phrases is listed in the section 16 of this safety data sheet.

2.2 Label elements

Hazard pictogram: not applicable

Signal word: not applicable

Hazard statement(s): not applicable

Precautionary statement(s) (prevention):

P260 – Do not breathe dust.
P264 – Wash eyes and skin thoroughly after handling.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

2.3 Other hazards

The substance does not fulfill the criteria for PBT or vPvB substance.
No additional hazards had been determined.

3. Composition/information on ingredients

3.1 Substances

3.1.1 For substances classified according to the Regulation (EC) No. 1272/2008 is indicated

Safety data sheet

According to the Commission Regulation (EU) No. 453/2010

Date of issue: 1. 12. 1999

Revision Date: 31. 5. 2015

Road salt

Chemical name:	Sodium chloride
Concentration in (%):	> 99,8 %
Hazard pictogram(s):	not applicable
Signal word:	not applicable
Code of hazard class and hazard category:	not applicable
Hazard statement(s):	not applicable
Precautionary statement(s) according to the CLP regulation:	P260 P264 P280
CAS number:	7647-14-5
EC (EINECS) number:	231-598-3

Full text of the P phrases is listed in the section 16 of this safety data sheet.

3.2 Mixtures

Not applicable - it is not a mixture.

4. First aid measures

4.1 Description of first aid measures

First aid personnel must take care on their own safety. In case of accident or if you feel unwell, or in case of the occurrence of any symptoms or doubts, consult your health condition with a doctor and provide information from this safety data sheet. Ensure the functioning of the vital functions (artificial respiration, inhalation of oxygen, heart massage). In case of unconsciousness place the affected person into the stabilized position on the side and do not administer any oral products.

Following aspiration/inhalation:

This route of exposure is not very probable.

Following skin contact:

Affected areas wash with water and soap and treat with protective cream.

Following eye contact:

Remove contact lenses, if present and easy to do. Rinse eyes with pure fresh running water stream for at least 15 minutes while holding eyelids apart. If symptoms persist seek out medical attention.

After ingestion:

Rinse mouth with water, drink 2 to 3 glasses of water. Do not induce vomiting!

4.2 Most important symptoms and effects, both acute and delayed

Not applicable. Road salt is not acutely toxic via the oral, dermal or inhalation route. It can cause slight respiratory tract irritation by dust, skin and eyes by concentrated solution. If swallowed large amounts may cause nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Follow the advice listed in section 4.1.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water, foam, CO₂. The product is not combustible. The type of extinguishing agent to adapt the surrounding area.

Unsuitable extinguishing media: Not applicable.

5.2 Special hazards arising from the substance or mixture

Do not breathe combustion products. The thermal decomposition can cause the formation of toxic fumes (chlorine, hydrogen chloride).

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5.3 Advice for firefighters

Firefighters equip with breathing apparatus, adequate to environmental conditions, independent of the surrounding atmosphere and adequate protective clothing. Use protective means against acid gases.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Avoid contact with eyes and skin and dust formation, do not breathe dust. Follow the instruction in section 8. Wear protective clothing, protective gloves, a container with pure water for washing out eyes should be placed in the workplace.

6.1.2 For emergency responders

See section 6.1.1.

6.2 Environmental precautions

Prevent a penetration into soil, drainage, surface waters or groundwater. In case of a bigger amount of leakage into surface waters notify the competent authorities.

6.3 Methods and material for containment and cleaning up

6.3.1 Advices how to contain a spilled substance or mixture

Prevent a leakage; place the damaged packaging in the emergency containers. In case of a bigger amount of leakage, to create barriers, cover drains.

6.3.2 Advices how to clean-up a spilled substance or mixture

Sweep up the leaked substance carefully (without creating dust) or preferably to suck and collect in suitable labelled containers. If it is not contaminated, it can be reused. Rinse the contaminated area with a bigger amount of water. Contaminated material as a waste store in a safe place and ensure a disposal in accordance with the waste legislation as stated in section 13.

6.3.3 Any other information relating to spills and releases

Not applicable.

6.4 Reference to other sections

Personal protective means are listed in section 8. Disposal instructions are listed in section 13.

7. Handling and storage

7.1 Precautions for safe handling

Follow working instructions. Read the label (etiquette) before using. Avoid contact with eyes, skin and clothing and dust formation, do not breathe dust. Wash hands and face thoroughly after the work. Beware of smoking, eating and drinking at the place of usage and storage of material. Prevent spills and penetration into drains. Employees shall wear protective working clothing, shoes, gloves, goggles, respirator.

7.2 Conditions for safe storage, including any incompatibilities

Store in well-closed original undamaged containers, in dry, cold and well-ventilated rooms. Keep out of the reach of children. Do not store together with food, beverages and feed. For longer storage do not store in containers made of aluminum and its alloys. Time period of workability is 2 years in case of compliance with storage and transport conditions.

7.3 Specific end use(s)

Is listed in section 1.2.

8. Exposure controls/personal protection

8.1 Control parameters

PNEC: 5 mg/l (fresh water), 19 mg/l (water - intermittent releases),
500 mg/l (sewage treatment plant), 4,86 mg/kg/day (soil)

DNEL: workers: Acute / short-term exposure - systemic effects, Dermal: 295,52 mg/kg/day
workers: Acute / short-term exposure - systemic effects, Inhalation: 2 068,62 mg/m³

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workers: Long-term exposure - systemic effects, Dermal: 295,52 mg/kg/day
workers: Long-term exposure - systemic effects, Inhalation: 2 068,62 mg/m³
general population: Acute / short-term exposure - systemic effects, Dermal: 126,65 mg/kg/day
general population: Acute / short-term exposure - systemic effects, Inhalation: 433,28 mg/m³
general population: Acute / short-term exposure - systemic effects, Oral: 126,65 mg/kg/day
general population: Long-term exposure - systemic effects, Dermal: 126,65 mg/kg/day
general population: Long-term exposure - systemic effects, Inhalation: 433,28 mg/m³
general population: Long-term exposure - systemic effects, Oral: 126,65 mg/kg/day

Occupational exposure limits in the working environment

Czech Republic (Government Regulation No. 361/2007 Coll., as amended by valid act): **The maximum permissible concentration (NPK-P)** of the dust of substance is not determined. As the equivalent value is considered 2 mg/m³ as at other irritating dusts.

European Union (Directive No. 2006/15/EC and No. 2009/161/EU): not determined.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Work in a well-ventilated room. Minimize dusts formation when handling. Follow the usual measures of health protection while working with chemical substances and mixtures, especially avoid ingestion and contact with the respiratory organs, eyes and skin. I.e. do not eat, drink and smoke while working. Wash your hands with warm water and soap before and after working. Treat your skin with appropriate protection creams. Personal protective equipment is recommended.

8.2.2 Individual protection measures, such as personal protective equipment

- a) Eye/face protection – safety goggles
- b) Skin protection
 - Hand protection – protective rubber or plastic gloves,
 - Other – protective working clothing, protective shoes,
- c) Respiratory protection – respirator capturing dust,
- d) Thermal hazards – not applicable (substance does not represent thermal hazard).

The manufacturer's instructions for using of personal protective equipment must be fulfilled.

8.2.3 Environmental exposure controls

Proceed in accordance with the valid legislation for the air and water protection. Avoid release into the environment, capture the leakage.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) appearance	white to gray coarse-grained crystals
b) odour	odourless
c) odour threshold	not determined
d) pH	6 – 9 (50 g/)
e) melting point/freezing point	801°C
f) initial boiling point and boiling range	1 400°C
g) flash point	not determined
h) evaporation rate	not determined
i) flammability (solid, gas)	not flammable
j) upper/lower flammability or explosive limits	not determined
k) vapour pressure	0 mbar
l) vapour density	not determined
m) relative density	2 161,5 kg/m ³ (bulk density)
n) solubility(ies)	in water: 359,0 g/l, soluble in glycerol
o) partition coefficient n-octanol/water	not determined
p) auto-ignition temperature	370°C

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q) decomposition temperature	not determined
r) viscosity	not determined
s) explosive properties	none
t) oxidising properties	none

9.2 Other information

Not determined.

10. Stability and reactivity

10.1 Reactivity

Beware of following conditions: In case of compliance with storage requirements the substance is stable. While working is necessary to follow the standards of safety and health protection at work.

Beware of following materials: strong oxidising agents, strong acids, metals – corrosion (if the substance is moist), bromine trifluoride – a violent exothermic reaction.

10.2 Chemical stability

In case of compliance with standard storage and handling conditions the substance is stable.

10.3 Possibility of hazardous reactions

It must not come into contact with strong acids, strong oxidising agents, bromine trifluoride – exothermic reactions.

10.4 Conditions to avoid

Avoid the humidity.

10.5 Incompatible materials

It must not come into contact with strong acids, strong oxidising agents, bromine trifluoride – exothermic reactions.

10.6 Hazardous decomposition products

Danger of releasing of toxic hydrogen chloride, sodium and chlorine and sodium oxides during the thermal decomposition.

11. Toxicological information

11.1 Information on toxicological effects

11.1.1 Substances (sodium chloride)

- acute toxicity – LD₅₀, oral, rat: > 3 550 mg/kg; LD₅₀, dermal, rabbit: > 10 000 mg/kg;
- skin corrosion/irritation – slightly irritates skin (rabbit);
- serious eye damage/irritation – slightly irritates eyes (rabbit);
- respiratory or skin sensitisation – undetected;
- germ cell mutagenicity – undetected;
- carcinogenicity – undetected;
- reproductive toxicity – undetected;
- STOT - single exposure – undetected;
- STOT - repeated exposure – undetected;
- aspiration hazard – undetected.

11.1.2 Mixtures

- acute toxicity – it is not a mixture;
- irritation – it is not a mixture;
- corrosivity – it is not a mixture;
- sensitisation – it is not a mixture;

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- e) repeated dose toxicity – it is not a mixture;
- f) carcinogenicity – it is not a mixture;
- g) mutagenicity – it is not a mixture;
- h) toxicity for reproduction – it is not a mixture.

11.1.3 Undetected.

11.1.4 Road salt is not classified as hazardous substance.

11.1.5 Undetected.

11.1.6 The substance is not classified as hazardous substance.

11.1.7 Information on likely routes of exposure

Skin/eye exposure, aspiration, ingestion (by swallowing) – for effects see section 11.1.4.

11.1.8 Symptoms related to the physical, chemical and toxicological characteristics

Undetected.

11.1.9 Delayed and immediate effects and also chronic effects from short and long-term exposure

Undetected.

11.1.10 Interactive effects

Undetected.

11.1.11 Absence of specific data

If some of the information are not listed in section 11, they were not available.

11.1.12 Mixture versus substance information

Undetected.

11.1.13 Other information

Not applicable.

12. Ecological information

12.1 Toxicity

Ecotoxicity	
LC ₅₀ (96 h, <i>Pimephales promelas</i>) for freshwater fishes:	10 610 mg/l
LC ₅₀ (96 h, <i>Lepomis macrochirus</i>) for freshwater fishes:	5 840 mg/l
LC ₅₀ (48 h, <i>Daphnia magna</i>) for freshwater invertebrates:	4 136 mg/l
EC ₅₀ (120 h, <i>Nitzschia sp.</i>) for freshwater algae:	2 430 mg/l

12.2 Persistence and degradability

Not applicable to the inorganic substances - cannot be removed from the water by biological cleaning processes.
CHSK and BSK not determined.

12.3 Bioaccumulative potential

For inorganic substances is irrelevant.

12.4 Mobility in soil

Not determined.

12.5 Results of PBT and vPvB assessment

Road salt is not classified as a PBT or vPvB substance.

12.6 Other adverse effects

Not applicable, it does not cause additional adverse effects.

13. Disposal considerations

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13.1 Waste treatment methods

Dispose the material by sweeping in accordance with valid legislation related to waste.

Do not remove together with municipal waste, not empty into drains.

Recommended classification according to the catalogue: 06 03 14 (solid salts and solutions not included under numbers 06 03 11 and 06 03 13)

Recommended disposal methods for a contaminated packaging:

When disposal the valid legislation for the hazardous waste treatment according to the categorization and the Waste Catalogue shall be followed.

Waste code:

150102 - plastic packaging category "O" (plastic buckets, PE bags and PP big bags).

Measures for the exposure control for the waste treatment:

Disposal of the substance and packaging should be proceed in accordance with valid legislation for personal, atmosphere and water precaution.

The legislation on the waste:

Czech Republic

Act No. 185/2001 Coll., on waste and amending some other Acts, as amended by valid act.

Decree of the Ministry of Environment No. 381/2001 Coll., which determines the Waste Catalogue, as amended by valid act.

European Union

Directive No. 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance).

Council Directive No. 91/689/EEC of 12 December 1991 on hazardous waste as amended by Directives No. 94/31/EC of 27 June 1994 and No. 2008/98/EC of the European Parliament and of the Council of 19 November 2008 and Regulation (EC) No. 166/2006 of the European Parliament and of the Council of 18 January 2006.

14. Transport information

14.1 UN number

It is not. Road salt is not classified as hazardous for transport (ADR (road), RID (rail), IMDG / GGVSea (sea transport)).

14.2 UN proper shipping name

It is not. Road salt is not classified as hazardous for transport (ADR (road), RID (rail), IMDG / GGVSea (sea transport)).

14.3 Transport hazard class(es)

It is not. Road salt is not classified as hazardous for transport (ADR (road), RID (rail), IMDG / GGVSea (sea transport)).

14.4 Packing group

It is not. Road salt is not classified as hazardous for transport (ADR (road), RID (rail), IMDG / GGVSea (sea transport)).

14.5 Environmental hazards

None. Road salt is not classified as hazardous for transport (ADR (road), RID (rail), IMDG / GGVSea (sea transport)).

14.6 Special precautions for user

Not determined.

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

Not regulated.

15. Regulatory information

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

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Czech Republic

Act No. 258/2000 Coll., on the protection of public health and amending some related Acts, as amended by valid act.

Government Regulation No. 361/2007 Coll., which stipulates the conditions of health protection at work, as amended by valid act.

Act No. 350/2011 Coll., on the chemical substances and chemical mixtures and amending some Acts (chemical Act), as amended by valid act.

Act No. 185/2001 Coll., on waste and amending some other Acts, as amended by valid act.

Decree of the Ministry of Environment No. 383/2001 Coll., on details of waste disposal, as amended by valid act.

Act No. 477/2001 Coll., on packaging and amending some related Acts (Act on Packaging), as amended by valid act.

European union

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive No. 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive No. 76/769/EEC and Commission Directives No. 91/155/EEC, No. 93/67/EEC, No. 93/105/EC and No. 2000/21/EC, as amended by valid act.

Regulation (EC) No. 689/2008 of the European Parliament and of the Council of 17 June 2008 concerning the export and import of dangerous chemicals, as amended by valid act.

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives No. 67/548/EEC and No. 1999/45/EC, and amending Regulation (EC) No. 1907/2006 (Text with EEA relevance), as amended by valid act.

Council Regulation (EC) No. 440/2008 of 30 May 2008 laying down test methods pursuant to Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance), as amended by valid act.

Directive No. 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (Text with EEA relevance).

Council Directive No. 91/689/EEC of 12 December 1991 on hazardous waste as amended by Directives No. 94/31/EC of 27 June 1994 and No. 2008/98/EC of the European Parliament and of the Council of 19 November 2008 and Regulation (EC) No. 166/2006 of the European Parliament and of the Council of 18 January 2006.

Council Directive No. 94/55/EC of 21 November 1994 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by road.

Council Directive No. 96/49/EC of 23 July 1996 on the approximation of the laws of the Member States with regard to the transport of dangerous goods by rail.

Council Directive No. 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work.

Council Directive No. 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive No. 89/391/EEC).

Commission Directive No. 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive No. 98/24/EC and amending Directives No. 91/322/EEC and No. 2000/39/EC (Text with EEA relevance).

Commission Directive No. 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive No. 98/24/EC and amending Commission Directive No. 2000/39/EC (Text with EEA relevance).

Council Directive No. 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances.

Commission Regulation (EU) No. 453/2010 of 20 May 2010 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance).

15.2 Chemical safety assessment

Chemical safety assessment for the substance has not been carried out by the producer.

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16. Other information

Statement:

Safety Data Sheet has been prepared in accordance with Regulations (EC) of the European Parliament and of the Council No. 1907/2006 and No. 1272/2008 and Commission Regulation (EU) No. 453/2010. This product shall be stored, handled and used with good hygiene practices of industry and in accordance with valid legislation. These information does not substitute the quality specification and cannot be considered as a guarantee of the suitability and applicability of this product for a specific application. The mentioned information correspond to a current state of knowledge and experiences and are in accordance with valid legislation. The customer is responsible for compliance with the valid regional legislation.

Sources of data used to compile the safety data sheet:

Safety Data Sheet for Road salt, safety data sheet of road salt supplier

Danger, Warning: not applicable

Wording of H-phrases, P-phrases:

Hazard statement(s) according to sections 2 and 3: not applicable

Precautionary statement(s) according to sections 2 and 3:

Prevention:

P260 – Do not breathe dust.

P264 – Wash eyes and skin thoroughly after handling.

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

BL	Safety Data sheet SDS
DNEL	Derived no-effect level
EC ₅₀	median effective concentration
LD ₅₀	median lethal dose
LC ₅₀	median lethal concentration
NPK-P	maximum permissible concentration
PBT	Persistent, bioaccumulative and toxic
PNEC	Predicted no-effect concentration
STOT	Specific Target Organ Toxicity
vPvB	Very persistent, very bioaccumulative

Instructions for training:

Persons who handling the product shall be instructed about the handling hazards and requirements for the health and environment precaution (see the appropriate provisions of the Labour Code).

Access to information:

Each employer shall in accordance with Article 35 of the Regulation (EC) of the European Parliament and of the Council No. 1907/2006 to provide access to the information from the safety data sheet to all personnel who use this product or are exposed to its effects at work, as well as to their representatives.

Revision: 25. 10. 2012 – supplement to section 1. (exemption from registration, use, Competent person responsible for the SDS), correction of sections 2., 3. and 16. (classification of substance according to the valid legislation and safety data sheet of road salt supplier), supplement to section 8. (PNEC, DNEL), supplement to section 10. (hazardous reactions and decomposition products, incompatible materials), 11. (acute toxicity) and 12. (ecotoxicity) and correction of section 13. (the reclassification of waste according to the Waste Catalogue, correction of packaging disposal) and 15. (the valid legislation update)

Revision: 5. 3. 2013 – change of person responsible for the SDS

Revision: 31. 5. 2015 – remove the classification according to the Directives No. 67/548/EEC and No. 1999/45/EC

The extent of responsibility:

Safety data sheet

According to the Commission Regulation (EU) No. 453/2010

Date of issue: 1. 12. 1999

Revision Date: 31. 5. 2015

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Responsibilities of safety data sheet recipients (customers, users, distributors, etc.) is to ensure that the information contained therein are well understood by all personnel who may use, handle, dispose or in any way come into contact with the product. Information and instructions given in this safety data sheet are reliable, provided that the product is used under the prescribed conditions and in accordance with the designated uses listed on the packaging or in the Product Data Sheets. User is responsible for any other application of this product, including the application of this product in combination with any another product or any other processes. Hence the user is responsible for determination of appropriate safety measures and the implementation of legislation covering his own activities. This version of the safety data sheet replaces all previous versions.