

## SAFETY DATA SHEET

Safety data sheet according to (EF) no. 1907/2006.

### POINT 1: Identification of material/compounds and of the company/factory

#### 1.1. Product identifier:

Jorenku Horse Block

#### 1.2. Relevant identifying use of the material or compound and the usage that is contraindicated:

Mineral feed for all animals

#### 1.3. Detailed information about the supplier for the safety data sheet:

Ab Hanson & Möhring  
Box 222  
SE-301 06 Halmstad  
Tel. + 46 35 18 32 00  
Sweden

Responsible for safety data sheet (e-mail): info@salinity.com

#### 1.4. Emergency phone:

Contact the poison centre in your own country.

### POINT 2: Identification of danger

#### 2.1. Classification of the material or compound:

Classification according to 67/548/EEC or 1999/45/EC: Not classified.

Classification according to (EC) No.1272/2008: Not classified.

#### 2.2. Label elements:

This chemical does not require labelling.

#### 2.3. Other dangers:

PBT/vPvB assessment has not been performed.

### POINT 3: Compensation of/information about contents

#### 3.1. Compensation of/information about contents

#### 3.2. Compounds:

Substance	Identification	Classification
Sodium chloride	CAS no.: 7647-14-5 EC no.: 231-598-3	-
Copper sulphate pentahydrate	CAS no.: 7758-99-8 EC no.: 231-847-6	N; R50/53 Xi; R36/38 Xn; R22 Acute tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 1; H410

Substance	Identification	Classification
Cobalt carbonate	CAS no.: 513-79-1 EC no.: 208-169-4 Index no.: 027-010-00-8	Cancer 2; R49 Mut 3; R68 Rep 2; R60 R42/43 N; R50, R53 Carc. 1B; H350i Muta. 2; H341 Repr. 1B; H360F Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-factor:10

Description of the mixture: The product consists of non-classified substances or substances in concentrations below the limits of declaration of contents. Besides sodium chloride the product contains the minerals calcium and magnesium, and the trace elements copper, manganese, zinc, iodine, selenium and cobalt (as cobalt carbonate). For further information see Technical Product Specification.

Substance comments Cobalt Carbonate has REACH registration number 01-2119513233-54. Cobalt carbonate is on the so called "Candidate List" (REACH) of substances of very high concern. The content is however low, below the limits of declaration.

## POINT 4: First aid measures

### 4.1. Description of first aid measures:

General If in doubt, seek medical advice.

Inhalation Move into fresh air and keep at rest.

Skin contact Remove contaminated clothes and rinse skin thoroughly with water. Clothing should be washed before reuse.

Eye contact Flush immediately with plenty of water for at least 5 minutes. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly. Drink plenty of water. Get medical attention.

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

Acute symptoms and effects

Inhalation: High concentration of dust may cause irritation to mucous membranes.

Skin contact: May cause slight irritation.

Eye contact: May cause eye irritation. Symptoms may be stinging pain and redness in the eyes.

Ingestion: May cause nausea, vomiting and diarrhea. Thirst.

### 4.3. Indication of whether emergency medical attention and special treatment are needed:

Treat symptomatically.

## POINT 5: Fire suppression

### 5.1. Suppression methods:

Use fire-extinguishing media appropriate for surrounding materials.

## 5.2. Special dangers in connection with the material or compound:

Fire and explosion hazards      The chemical is non-combustible.  
Hazardous combustion products      Hazardous fumes may be formed in fire situations. Can include, but are not limited to: Metal oxides. Chlorine. Hydrogen chloride (HCl).

## 5.3. Indication for a fire department:

Self-contained breathing apparatus may be required by rescue workers. In case of evacuation, use escape mask where possible.

## POINT 6: Accidental release measures

### 6.1. Personal precautions, personal protective equipment, and emergency procedures:

Avoid generation and spreading of dust. Avoid contact with skin and eyes. Use protective equipment as referred to in section 8.

### 6.2. Environmental protection indications:

Avoid discharge into drains, water courses or onto the ground.

### 6.3. Methods and equipment for containment and cleaning:

Sweep away and collect into a suitable container. Dispose of in accordance with local regulations for waste handling (see section 13).

### 6.4. References to other points:

See also point 8 and 13.

## POINT 7: Handling and storage

### 7.1. Measures for safe handling:

Handling      Avoid handling which leads to dust formation. Provide adequate ventilation. Avoid contact with eyes and prolonged skin contact. Use protective equipment as referred to in section 8.  
Advice on general occupational hygiene      Wash hands after contact with the chemical. Change contaminated clothing and take off protective equipment before the meal. Do not smoke, drink or eat in the workplace.

### 7.2. Conditions for safe storage, including any incompatibility:

Storage      Store in a tightly closed container in a dry place. Protect from rain / moisture. Store separated from: Strong acids. Oxidizing agents  
Metals. (corrosion).  
Requirements for storage rooms and vessels      Suitable containers: polyethylene. Stainless steel.  
Unsuitable containers: metals.

### 7.3. Special usage:

The identified uses for this product are detailed in Section 1.2.

## PUNKT 8: Exposure control/personal protective equipment

### 8.1. Control parameter:

Substance	Identification	Value
Copper and compounds, dust and mists (as Cu)		8-hour TWA: 1 mg/m <sup>3</sup> 15 min.: 2 mg/m <sup>3</sup>
Cobalt and Cobalt compounds (as Co)		8-hour TWA: 0.1 mg/m <sup>3</sup> Carc, Sen

Substance	Identification	Value
Zinc oxide	CAS no.: 1314-13-2 EC no.: 215-222-5 Index no.: 030-013-00-7	8-hour TWA: 5 mg/m <sup>3</sup> totaldamm
Manganese and its inorganic compounds (as Mn)		8-hour TWA: 0.5 mg/m <sup>3</sup>
Selenium and its compounds, except hydrogen selenide (as Se)		8-hour TWA: 0.1 mg/m <sup>3</sup>
dust, inorganic, inhalable fraction		8-hour TWA: 10 mg/m <sup>3</sup>
dust, inorganic, respirable fraction		8-hour TWA: 4 mg/m <sup>3</sup>

Other Information about threshold limit values:

The TWA value for "Copper and compounds, dusts and mists (as Cu)" is valid for CAS no 7758-99-8 Copper sulphate pentahydrate.

The TWA value for "Cobalt and Cobalt compounds (as Co)" is valid for CAS no 513-79-1 Cobalt carbonate.

Explanation of the notations: Carc = Capable of causing cancer and/or heritable genetic damage. Sen = Capable of causing respiratory sensitisation.

## 8.2. Exposure control:

Occupational exposure limits

Personal protective equipment must be CE-marked and should be chosen in collaboration with the supplier of such equipment. The recommended protective equipment and the specified standards are only suggestions. The latest version of the specified standard shall be used. Risk assessment of the relevant current work/operation (the actual risk) may lead to other control measures.

Technical measures to prevent exposure  
Respiratory protection

Provide adequate ventilation.  
During dust-raising work: Use respiratory equipment with particle filter, type P2. Reference to relevant standard EN 143.

Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Use gloves from resistant material, eg.: Nitrile. Polyvinyl chloride (PVC). Neoprene.

Eye protection

Use tight fitting goggles if dust is generated. Reference to relevant standard EN 166.

Skin protection (except hands)

Ordinary workwear.

Environmental exposure controls

Do not allow to enter into sewer, water system or soil.

Other Information

Eye wash facilities should be available when handling this chemical. Wash contaminated clothing before reuse.

## POINT 9: Physical and chemical characteristics

### 9.1. Information about basic physical and chemical characteristics:

Physical state

Solid.

Colour

Colorless to white.

Odour

Odourless.

Comments, Odour limit

Not relevant.



pH (aqueous solution)	Value: 6-9. Valid for sodium chloride. Test reference: 50 g/l. Test temperature: 20 °C
Melting point/melting range	Value: ~ 801 °C. Valid for sodium chloride.
Boiling point / boiling range	Value: 1413 °C. Valid for sodium chloride.
Comments, Flash point	Not applicable. Not flammable.
Comments, Evaporation rate	Not applicable.
Comments, Explosion limit	Not applicable.
Vapour pressure	Value: 0 mbar. Valid for sodium chloride. Test temperature: 20 °C
Comments, Vapour density	Not applicable.
Specific gravity	Value: ~ 2160 kg/m <sup>3</sup> . Valid for sodium chloride.
Solubility in water	Approx 317 g/l vid 20 °C. Valid for sodium chloride. Easily soluble.
Comments, Partition coefficient: octanol/ water	Not known. Not applicable.
Comments, Spontaneous combustability	Not applicable.
Comments, Decomposition temperature	Not known.
Comments, Viscosity	Not applicable.
Oxidising properties	Not oxidising.
<b>9.2. Other information:</b>	No further information is available.

## POINT 10: Stability and reactivity

### 10.1. Reactivity:

None known.

### 10.2. Chemical stability:

Stable under normal conditions of storage and use.

### 10.3. Risk of dangerous reactions:

None known (section 10.5).

### 10.4. Conditions that should be avoided:

Water and moisture.

### 10.5. Materials that should be avoided:

Strong acids, oxidizing agents and metals (corrosion).

### 10.6. Dangerous decomposition products:

Strong acids, e.g. hydrogen chloride (HCl), hydrogen selenide and oxidizing agents e.g. chlorine gas.

## POINT 11: Toxicological information

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

Toxicological Information:

LD<sup>50</sup> oral

Value: 3000 mg/kg

Animal test species: rat

Comments: Valid for pure sodium chloride. Literature value.

Other information regarding health hazards

General

The chemical itself has not been tested. The classification is based on information about the ingredients.

## Acute toxicity, Mixture estimate

Assessment of acute toxicity classification Based on available data, the classification criteria are not met.

### Potential acute effects

#### Inhalation

High concentrations of dust may irritate throat and respiratory system and cause coughing.

Slightly irritating.

#### Skin contact

May irritate and cause redness and pain.

#### Eye contact

#### Ingestion

Ingestion of significant amounts may cause nausea and vomiting. Other symptoms: thirst, cramps and cardiac effects.

Sodium chloride effects the blood pressure.

#### Irritation

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

#### Skin corrosion / irritation,

Sodium chloride, dermal irritation test, rabbit: slightly irritating (Source: IUCLID).

#### Aspiration hazard

Not applicable.

#### Eye damage or irritation other info

Sodium chloride, eye irritation test, rabbit: moderately irritating. (Source: IUCLID).

#### Delayed effects / repeated exposure

#### Sensitisation

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

#### Repeated dose toxicity

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

#### Carcinogenic, Mutagenic or Reprotoxic

#### Carcinogenicity

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

#### Mutagenicity

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

#### Teratogenic properties

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

#### Reproductive toxicity

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

## POINT 12: Environmental information

### 12.1. Toxicity:

#### Acute aquatic, fish

Value: 7341 mg/l. Method of testing: LC<sub>50</sub>.

Fish, species: Carassius auratus

Duration: 96 hours

Test reference: Valid for pure sodium chloride. Literature value.

#### Acute aquatic, algae

Value: 9000 mg/l. Method of testing: EC<sub>50</sub>.

Duration: 7 days

Test reference: Valid for pure sodium chloride. Literature value.

#### Acute aquatic, Daphnia

Value: 4135 mg/l. Method of testing: EC<sub>50</sub>.

Daphnia, species: Daphnia magna

Duration: 48 hours

Test reference: Valid for pure sodium chloride. Literature value.

#### Ecotoxicity

The chemical itself has not been tested. The assessment is based on information about the ingredients.

### 12.2. Persistence and degradability:

The chemical consists mainly of inorganic materials which are not biodegradable. Sodium chloride dissociates into sodium- and chloride ions in water.

### 12.3. Bioaccumulative potential:

Sodium chloride will not bio-accumulate. The product contains small amounts of potentially bioaccumulating substances.

## 12.4. Mobility in soil:

Sodium chloride is water soluble.

## 12.5. Results of PBT and vPvB assessment:

PBT assessment results

PBT assessment has not been performed.

vPvB evaluation results

vPvB assessment has not been performed.

## 12.6. Endocrine-disrupting capacities:

Other adverse effects / Remarks

High doses of sodium chloride can be harmful to plants.

## POINT 13: Removal

### 13.1. Methods for waste handling:

Specify the appropriate methods of disposal

Confirm disposal procedures with environmental engineer and local regulations. Contact specialist disposal companies. In case of larger quantities, the content of trace elements (copper, manganese, zinc, iodine, selenium and cobalt) need to be considered. For further information about product composition see Technical Product Specification. The waste code (EWC-Code) is intended as a guide. The user must select a code if the use differs from the one mentioned below. Empty and cleaned packages may be recycled.

EWC waste code

EWC: 06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13 EWC: 020109

agrochemical waste other than those mentioned in 02 01 08

## POINT 14: Transport information

14.1. UN-number or ID-number: None.

14.2. UN-shipment designation (UN proper shipping name): None.

14.3. Transport danger class(es): None.

14.4. Packaging group: None.

14.5. Environmental dangers: None.

14.6. Special regulations for the user: None.

14.7. Bulk transport by sea according to IMO instruments: Not relevant.

## POINT 15: Information about regulations

### 15.1. Special determinations/special rules for the material or compound with respect to safety, health and environment:

Other Label Information

Cobalt carbonate is on the so called "Candidate List" (REACH) of substances of very high concern. The content is however low, below the limits of declaration.

References (laws/regulations)

Dangerous Substance Directive 67/548/EEC.

Dangerous Preparations Directive 1999/45/EC.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments.

Regulation (EC) No 1907/2006 (REACH) Annex II: Safety data sheets, with later amendments.

EH40/2005 Workplace exposure limits, with later amendments.



## European Waste Catalogue and Hazardous Waste List Dangerous Goods regulations

### 15.2. Chemical safety evaluation:

None

### POINT 16: Other information

List of relevant R-phrases (under headings 2 and 3).

- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R50 Very toxic to aquatic organisms.
- R42/43 May cause sensitization by inhalation and skin contact.
- R68 Possible risk of irreversible effects.
- R60 May impair fertility.
- R22 Harmful if swallowed.
- R36/38 Irritating to eyes and skin.
- R49 May cause cancer by inhalation.
- R53 May cause long-term adverse effects in the aquatic environment.

List of relevant H-phrases (Section 2 and 3).

- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H410 Very toxic to aquatic life with long lasting effects.
- H400 Very toxic to aquatic life.
- H319 Causes serious eye irritation.
- H315 Causes skin irritation.
- H350i May cause cancer by inhalation.
- H341 Suspected of causing genetic defects
- H360F May damage fertility.

Abbreviations and acronyms used

- EC<sub>50</sub>: The effective concentration of substance that causes 50% of the maximum response
- LC<sub>50</sub>: Concentration in water having 50% chance of causing death to aquatic life
- LD<sub>50</sub>: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%.
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

Important data sources used to construct the safety data sheet

The Safety Data Sheet is based on information provided by the producer.

### Changes since previous version:

Not relevant - first edition.

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