Updated:19.01.07

MATERIAL SAFETY DATA SHEET - MSDS

1 - Product and Company Information

Name of material: Rock salt, granular Art.Nr.: 31851 Innerpackage: PP bottle

Manufacturer/supplier identification:

Company:

Gatt-Koller GmbH
Swarovskistrasse 74
A-6067 Absam
Tel.: 0043-5223-44216-0 Fax.: 0043-5223-43216

Emergency Telephone:

Tel.: 0049-551-19240

2 - Composition/Information on Ingredients

Product Name CAS # EC no Annex I Index Number
SODIUM CHLORIDE 7647-14-5 231-598-3 None
Formula NaCl
Molecular Weight 58.44 AMU
Synonyms Common salt * Dendritis * Extra Fine 200 Salt *
Extra Fine 325 Salt * Halite * H.G. blending *
Natriumchlorid (German) * Purex * Rock salt *
Saline * Salt * Sea salt * Table salt * Top
flake * USP sodium chloride * White crystal

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Not hazardous according to Directive 67/548/EEC.

4 - First Aid Measures

AFTER INHALATION
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
AFTER SKIN CONTACT
In case of contact, immediately wash skin with soap and copious amounts of water.
AFTER EYE CONTACT
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.
AFTER INGESTION
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA
Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.
SPECIAL RISKS
Specific Hazard(s): Emits toxic fumes under fire conditions.
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. For fires involving this material, do not enter any enclosed or confined fire space

without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of the normal products of combustion or oxygen deficiency

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.

Hand Protection: Protective gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance Physical State: Solid

Property	Value At Temperature or Pressure
pH	7
BP/BP Range	1,413 °C
MP/MP Range	801 °C
Flash Point	N/A
Flammability	N/A
Autoignition Temp	N/A
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	1 mmHg 865 °C
SG/Density	2.165 g/cm3
Partition Coefficient	N/A
Viscosity	N/A

Vapor Density N/A
Saturated Vapor Conc. N/A
Evaporation Rate N/A
Bulk Density N/A
Decomposition Temp. N/A
Solvent Content N/A
Water Content N/A
Surface Tension N/A
Conductivity N/A
Miscellaneous Data N/A
Solubility Solubility in Water:Soluble.
Other Solvents: 36G/100ML @ 20 °C

10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Sodium/sodium oxides, Hydrogen chloride gas.
HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: VZ4725000
ACUTE TOXICITY
LD50
Oral
Rat
3000 mg/kg
LC50
Inhalation
Rat
> 42,000 mg/m3
1H
LD50
Oral
Mouse
4000 mg/kg
LD50
Intraperitoneal
Mouse
2602 MG/KG
LD50
Subcutaneous
Mouse
3 GM/KG
LD50
Intravenous
Mouse

645 MG/KG
LD50
Intracervical
Mouse
131 MG/KG
LD50
Skin
Rabbit
> 10000 mg/kg
IRRITATION DATA
Skin
Rabbit
50 mg
24H
Remarks: Mild irritation effect
Skin
Rabbit
500 mg
24H
Remarks: Mild irritation effect
Eyes
Rabbit
100 mg
Remarks: Mild irritation effect
Eyes
Rabbit
100 mg
24H
Remarks: Moderate irritation effect
Eyes
Rabbit
10 mg
Remarks: Moderate irritation effect
SIGNS AND SYMPTOMS OF EXPOSURE
Ingestion of large amounts causes vomiting and diarrhea. Dehydration and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract.
ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Sodium chloride (NaCl) in contact with eyes can cause irritation or redness due to abrasion.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.
CHRONIC EXPOSURE - MUTAGEN
Human

125 MMOL/L
Cell Type: fibroblast
DNA inhibition
Rat
16800 MG/KG
Oral
4W
Unscheduled DNA synthesis
Rat
400 MG/KG
Oral
Other mutation test systems
Rat
2338 MG/KG
Intraperitoneal
Cytogenetic analysis
Mouse
101 MMOL/L
Cell Type: lymphocyte
DNA damage
Mouse
57200 UMOL/L
Cell Type: lymphocyte
Mutation in mammalian somatic cells.
Hamster
4 GM/L
Cell Type: lung
Micronucleus test
Hamster
275 MMOL/L
Cell Type: ovary
DNA damage
Hamster
160 MMOL/L
Cell Type: ovary
Cytogenetic analysis
Hamster
7500 MG/L
Cell Type: lung
Cytogenetic analysis
CHRONIC EXPOSURE - TERATOGEN
Species: Rat
Dose: 1710 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (13D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system. Effects on Embryo or Fetus: Fetal death. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted

fetus).
Species: Mouse
Dose: 1900 MG/KG
Route of Application: Subcutaneous
Exposure Time: (11D PREG)
Result: Effects on Embryo or Fetus: Fetal death.
Species: Mouse
Dose: 1900 MG/KG
Route of Application: Subcutaneous
Exposure Time: (10D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system.
Species: Mouse
Dose: 2500 MG/KG
Route of Application: Subcutaneous
Exposure Time: (10D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).
CHRONIC EXPOSURE - REPRODUCTIVE HAZARD
Species: Woman
Dose: 27 MG/KG
Route of Application: Intraplacental
Exposure Time: (15W PREG)
Result: Effects on Fertility: Abortion.
Species: Rat
Dose: 145 GM/KG
Route of Application: Oral
Exposure Time: (7D PRE/1-22D PREG)
Result: Effects on Newborn: Delayed effects.
Species: Rat
Dose: 56400 MG/KG
Route of Application: Oral
Exposure Time: (5D PRE-21D POST)
Result: Effects on Newborn: Biochemical and metabolic. Maternal Effects: Postpartum.
Species: Rat
Dose: 10 GM/KG
Route of Application: Intraperitoneal
Exposure Time: (17-20D PREG)
Result: Effects on Newborn: Behavioral.
Species: Rat
Dose: 10 MG/KG
Route of Application: Parenteral
Exposure Time: (1D PRE)
Result: Maternal Effects: Ovaries, fallopian tubes.
Species: Rat
Dose: 500 MG/KG
Route of Application: Intrauterine

Exposure Time: (4D PREG)
Result: Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).
Species: Rat
Dose: 50 MG/KG
Route of Application: Intrauterine
Exposure Time: (6D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Species: Mouse
Dose: 13440 MG/KG
Route of Application: Subcutaneous
Exposure Time: (2-6D PREG)
Result: Effects on Fertility: Abortion.
Species: Monkey
Dose: 6 GM/KG
Route of Application: Intrauterine
Exposure Time: (18W PREG)
Result: Effects on Fertility: Abortion.
Species: Horse, donkey
Dose: 480 MG/KG
Route of Application: Intraplacental
Exposure Time: (45D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Maternal Effects: Other effects. Endocrine:Estrogenic.

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL
Small amounts may be washed down the drain with excess water.
Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR
Non-hazardous for road transport.
IMDG
Non-hazardous for sea transport.
IATA
Non-hazardous for air transport.

15 - Regulatory Information

Not hazardous according to Directive 67/548/EEC.
COUNTRY SPECIFIC INFORMATION
Germany

Water pollution class	1 (slightly polluting substance) VwVwS Annex. 2 Id-Nr. 270
Storage class VCI	10-13

16 - Other Information
WARRANTY
The above information is believed to be correct but does not

purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Gatt-Koller GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Gatt-Koller GmbH
Swarovskistrasse 74
A-6067 Absam
Tel.: 0043-5223-44216-0 **Fax.: 0043-5223-43216**