The Chemistry Store

1.

Material Safety Data Sheet

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1133 Walter Price St., Cayce, South Carolina 29033 • Phone: 800-224-1430 • Emergency: Infotrac 800-535-5053

According to EEC directive 91/155/EEC	Last issue : 23.12.2009	
IDENTIFICATION OF THE PRODUC	CT AND OF THE COMPANY	SALT (Sodium chloride)
Trade name (common name)	Salt (sea salt, vacuum salt or ro	ck salt)
Chemical name	Sodium chloride	
Supplier	The Chemistry Sto	ore
	1133 Walter Price	e St.
	Cayce, SC 29033	

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a substance in conformity with EEC directives

· Composition :

	Main constituent	Sodium Chloride
	Other constituents (impurities or additives) causing a risk	None
	Usual impurities	Naturally present secondary salts such as sulphates, bromides and chlorides of calcium, magnesium, potassium or sodium)
	Usual additives	Anticaking agents (potassium or sodium ferrocyanide, magnesium oxide or carbonate, sodium alumino-silicate,), food additives and nutrients (potassium fluoride, potassium iodide or iodate, sodium nitrite,)
0	Information on the substance :	
	Chemical identity	Sodium chloride (NaCl)
	CAS number	7647-14-5
	EINECS number	231-598-3
	Annex - 1 number (European dangerous substances list according to directive 67/548/EEC)	None

3. HAZARDS IDENTIFICATION

This product does not contain any hazardous components and is not classified as hazardous according to EEC Dangerous Substance Directive and Dangerous Preparation Directive.

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Potential health effects :

Protective equipment

Routes of entry	Ingestion, inhalation, skin contact
Acute ingestion	Nausea, vomiting ; ingestion of large amounts (greater than 0.1 kg) can cause gastrointestinal upset and irritation of the stomach
Chronic ingestion	Not applicable
Acute inhalation Chronic inhalation	Slight irritation of the nose, sneezing Not applicable
Acute skin contact Chronic skin contact	Irritation Not applicable
Carcinogenicity	Not listed as a carcinogen or mutagen
Medical conditions aggravated by over- exposure	In some cases of confirmed hypertension, ingestion may result in elevated blood pressure but this applies only to salt-sensitive individuals
4. FIRST AID MEASURES	
First aid for eyes	For eye contact, rinse thoroughly with plenty of water, lifting eyelids occasionally. Seek medical advice if irritation develops
First aid of inhalation	Not applicable
First aid for skin	Wash skin thoroughly with water and rinse carefully
First aid for ingestion	A few grams or less would not be harmful. For larger quantities, drink large amounts of water or milk. Induce vomiting in case of very excessive intake
Advice to physician	No specific recommendations
5. FIRE-FIGHTING MEASURES	
Extinguishing media	This product is not flammable. Use all media appropriate to the surrounding fire
Unsuitable extinguishing media	None
Special exposure hazard	In case of fire and/or explosion do no breathe fumes
Hazardous decomposition/combustion products	Toxic fumes may be produced under fire conditions

A self-contained breathing apparatus with a full facepiece operated in the pressure demand or positive-pressure mode is recommended

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6. ACCIDENTAL RELEASE MESURES

	Personal precautions	No specific recommendations
	Environmental precautions	Collect as much as possible in a clean container for (preferable) reuse or disposal
	Methods of cleaning up	Vacuum or sweep up and put it into a container for proper disposal. Rinse remnant with plenty of water
7.	HANDLING ANS STORAGE	
	Handling	No specific recommendations
	Fire and explosion prevention	Not applicable
	Storage requirements	Store in a dry place (relative humidity = 75 % maximum) to avoid salt caking and becoming hard. Special sensitivity : contact with strong acids ; under conditions of high heat, sodium chloride may react with lithium to yield elemental sodium which intensifies fire conditions

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits	No exposure limit has been established
Personal protection :	
Respiratory and ventilation requirements	Dust collection equipment may be employed
Eye protection requirements	Safety glasses should be worn in dusty areas
Skin and hand protection requirements	Normal work gloves are adequate. Protective clothing may be worn in dusty areas, but is generally not required. Warm water showering and hand washing is suggested after working in extremely dusty areas

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Appearance	Usually occurs as a mixture of different size crystals
Colour	White to grey or brownish, according to the type and the origin of salt
Odour	None
Boiling point	1465°C

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Melting point	801°C
Flash point	Not applicable
Flammability	Not flammable
Autoignition temperature	Not applicable
Explosive properties	None
Oxidizing properties	Not applicable
Vapour pressure	Not applicable
Density (NaCl crystal)	2.16 g/cm ³ (20°C)
Bulk density	Usually 1.0 - 1.25 g/cm3 according to grain size and type of salt
Molecular weight	58.45 g
pH value	$7 \pm 2 (100 \text{ g/l solution})$
Solubility in water	358 g NaCl/kg H ₂ O at 20°C
Solubility in other solvents	Soluble in glycerol
Partition coeficent n-octanol/water	$\log Pow = -3.0$ (calculated)
Relative vapour density	Not applicable
Viscosity	Not applicable
10.STABILITY AND REACTIVITY	
Stability	Stable under recommended storage and handling conditions (see section 7)
Incompatibilities/conditions to avoid	Salt reacts violently with BrF ₃ Avoid contact with strong acids

 Materials to avoid
 Metals (except stainless steel)

 Hazardous decomposition products...
 Heating at high temperatures can produce toxic fumes May evolve chlorine gas when in contact with strong acids

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11.TOXICOLOGICAL INFORMATION

Acute toxicity	
Oral LD50 (rat)	3.75 g/kg

Irritation Eyes

Irritating to eyes

12. ECOLOGICAL INFORMATION

Biodegradability	Stable
Bioaccumulation	No
Ecotoxicity/Environmental degradation	Effects, only for large amounts of salt, on plants (metabolic disturbance) and on soils (mineral imbalance)

13.DISPOSAL CONSIDERATIONS

Product	No specific recommendations
Contaminated packaging	No specific recommendations
Waste disposal method	For disposal of this material as a waste, act in accordance with all applicable national and local waste management regulations

14. TRANSPORT INFORMATION

Land transport :

ADR class	Not restricted	ADR item number	Not relevant
RID class	Not restricted	RID item number	Not relevant
Hazard identification No.	Not relevant	Substance identification No.	Not relevant
TREM-Card	Not relevant	UN number	None
Proper shipping name	Not relevant		
Sea transport			
IMO/IMDG code	Not restricted	Class	Not restricted
Packing group	Not relevant	UN number	None
EMS	Not relevant	MFAG	Not relevant
Marine pollutant	No		
Proper shipping name	Not relevant		

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Air transport

IATA/ICAO-DGR		UN number	None
Class	Not restricted	Packing group	Not relevant
Proper shipping name	Not relevant		

15.REGULATORY INFORMATION

Chemical identity	Sodium chloride (NaCl)
Labelling according to EEC directives	
Annex-1 number	None
Symbol (s)	None
Risk phrase(s)	None
Safety phrase(s)	None

16.OTHER INFORMATION

All statements, technical information and recommendations contained herein only concern the above mentioned product. They are the best of our knowledge, reliable and accurate ; however no warranty either expressed or implied is made with respect thereto, nor will any liability be assumed for damages resultant from the use of the materiel described.

It is the responsibility of the user to comply with all applicable national and local laws and regulations. It remains also the responsibility of the user to make sure that the information is appropriate and complete for his special use of this product. The user should consider the health hazards and safety information provided herein as a guide and should take the necessary steps to instruct employees and to develop work practice procedures to ensure a safe work environment.

This information is believed to be accurate and is intended for general guidance. It should not be construed as a guarantee of its suitability for a particular application. Typical properties of products are given for guidance only and do not necessarily represent manufacturing specifications.