BIACHEM LIMITED

Certificate No. 10328

TEL: 020 7250 1905
FAX: 020 7250 1913
email: sales@biachem.com
website: www.biachem.com

BOUNDARY HOUSE
91-93 CHARTERHOUSE STREET
LONDON EC1M 6HR
ENGLAND

Version "Biachem 0" – Revision date 21/07/2016 – Print Date 21/07/2016

Material Safety Data Sheet

1 IDENTICIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

1.1 Product Identifier

Product Name :	SALT
Chemical Name :	Sodium chloride
Alternative Name :	Vacuum Salt, Compacted Salt, IVS, Granular Salt, Tablet Salt, Salt Pebbles
Chemical Formula :	NaCl
CAS Number :	7647-14-5
EC Number :	231-598-3
REACH Registration Number :	Exempted from Registration according to Article 2 (7)b and Annex V of REACH

1.2 Relevant identified uses of the substance: Chemical manufacture, food industry, animal feed industry, water treatment

1.2.1 Uses advised against: No uses advised against have been identified

1.3 Company Details

Company Name :	Biachem Limited
Address :	30-32 Ludgate Hill, London, EC4M 7DR
Telephone :	0207 250 1905
Web :	www.biachem.com
E-mail:	sales@biachem.com

1.4 Emergency Telephone Office hours: +44 (0) 207 250 1905
Out of hours: +44 (0) 778 590 4875

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance

2.1.1 Classification according to Regulation (EC) 1272/2008
Not Classified

2.1.2 Classification according to the Dangerous Substances Directive 67/548/EEC
Not Classified

2.2 Labelling elements

2.2.1 Labelling according to Regulation (EC) 1272/2008
No labelling requirements

2.2.1 Labelling according to the Dangerous Substances Directive 67/548/EEC
No labelling requirements

2.3 Other hazards: Unlikely to cause harmful effects under normal conditions of handling and use

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Main constituent	Formula	CAS Number	EC Number	Wt. Percent
Sodium Chloride	NaCl	7647-14-5	231-598-3	>99.9%w/w (on dry basis)

Contains:
part per million (ppm) levels of a non-toxic anti-caking additive, Sodium hexacyanoferrate (II) – E535

3.2 Hazardous Ingredient: Contains no Hazardous Ingredients in accordance with EC Regulation 1907/2006

4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice	No known delayed effects
Following inhalation	remove patient from exposure

Following skin contact	Wash skin with water
Following eye contact	Remove contact lenses if worn Rinse eye thoroughly with eye wash solution or clean water for at least 10 minutes Eyelids should be held away from the eyeball to ensure thorough rinsing If symptoms develop seek medical attention
After ingestion	DO NOT induce vomiting Wash out mouth with water and give 200-300 ml (half a pint) of water to drink Obtain medical advice if ill effects occur

5 FIRE FIREFIGHTING MEASURES

5.1 Extinguishing Media

5.1.1 Suitable extinguishing media

The product is non-flammable
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

5.1.2 Unsuitable extinguishing media

None

5.2 Special hazards arising from the substance

Salt withstands temperatures up to its melting point and beyond without decomposing, but at very high temperatures (greater than approximately 800^{o}c), a vapour may be emitted which is particularly irritating to the eyes

5.3 Advice for firefighters

No special precautions required

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

6.1.1 For non-emergency personnel

Avoid prolonged contact with the skin and inhalation of dust concentrations
No special protective clothing is required
Normal good handling and housekeeping practice is adequate
An eyewash bottle with clean water should be available

6.2 Environmental Precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environment Agency or other appropriate regulatory body

6.3 Methods for containment and clean up

Clear up spillages
Use vacuum suction, or shovel into containers for disposal
Store material in a suitable, correctly labelled closed container, preferably for re-use, otherwise for disposal

7 HANDLING AND STORAGE

7.1 Precautions for Safe Handling

7.1.1 Protective measures

Avoid prolonged skin contact
Keep dust levels to a minimum, salt is non-flammable but static electricity can be generated by pneumatic conveying, therefore pipes should be bonded and earthed, especially in environments where a spark could prove hazardous
Atmospheric levels should be controlled in compliance with the workplace exposure limit (see Section 8.1)

7.1.2 Advice on general occupational hygiene

Normal good handling and housekeeping practice is adequate

7.2 Conditions for safe storage, including any incompatibilities

Due to its hygroscopic nature, dried vacuum salt should be stored in a dry atmosphere and away from concentrated acids
Absorbs moisture if the relative humidity is greater than 75%

BIACHEM LIMITED

Certificate No. 10328

TEL: 020 7250 1905
FAX: 020 7250 1913
email: sales@biachem.com
website: www.biachem.com

BOUNDARY HOUSE
91-93 CHARTERHOUSE STREET
LONDON EC1M 6HR
ENGLAND

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

Listed by H&SE (Guidance Note EH40)
WEL Recommended Limits: Total Inhalable Dust is: 10mg/m_3 (8hr TWA)
Respirable Dust is : 4mg/m_3 (8hr TWA)

8.2 Exposure Controls

8.2.1 Appropriate engineering controls

Static electricity can be generated by pneumatic conveying; therefore pipes should be bonded and earthed, especially in environments where a spark could prove hazardous

8.2.2 Personal protection

8.2.2.1 Eye/face protection — Wear chemical safety goggles in situations where contact with the eyes may occur

8.2.2.2 Hand protection — Protective gloves to be worn if prolonged contact is anticipated
Dry salt and concentrated solutions can cause withdrawal of fluid from the skin

8.2.2.3 Skin/body protection — No special protective equipment required
Skin should be washed to remove salt

8.2.2.4 Respiratory protection — If the process is such that salt dust is generated, a disposable face mask should be worn

8.2.3 Environmental exposure controls

Contain any spillage
Avoid discharges to the environment where possible

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance :	White/colourless crystalline solid
Odour :	Odourless
Odour threshold :	Not applicable
pH :	10.0 approx. (10% solution)
Melting point :	802^{O}c
Boiling point :	1413^{O}c
Flash point :	Non-flammable
Evaporation rate :	No data
Flammability :	Non-flammable
Upper flammability limit :	Non-flammable
Lower flammability limit :	Non-flammable
Vapour pressure :	2.4mm Hg @ 747^{O}c
Vapour Density :	Not applicable
Relative density :	up to 2.165 g cm^{-3} @20^{O}c
Water solubility :	35.9 g/100g @ 0^{O}c ; 39.2 g/100g @ 100^{O}c
Partition coefficient :	Not applicable
Auto-ignition temperature :	Non-flammable
Decomposition temperature :	No available data
Viscosity :	Not applicable (solid)
Explosive properties :	Not applicable
Oxidising properties :	Not applicable

10 STABILITY AND REACTIVITY

10.1 Reactivity — Reacts with strong sulphuric acid or nitric acid

10.2 Chemical Stability — Stable under normal storage and handling conditions

10.3 Possibility of hazardous reactions

Reacts with strong sulphuric acid or nitric acid

TEL: 020 7250 1905
FAX: 020 7250 1913
email: sales@biachem.com
website: www.biachem.com

BOUNDARY HOUSE
91-93 CHARTERHOUSE STREET
LONDON EC1M 6HR
ENGLAND

10.4 Conditions to avoid: Contact with strong sulphuric acid or nitric acid (hydrogen chloride gas is emitted)

10.5 Materials to avoid: Under wet conditions can corrode many common metals, particularly iron, aluminium and zinc

10.6 Hazardous decomposition products: Trace amounts of hydrogen chloride gas may be evolved at temperatures in excess of 800^{O}c

11 TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Inhalation: High concentrations of dust may be irritant to the respiratory tract

Ingestion : Oral LD_{50}, rat 3000 mg/kg
May cause vomiting and diarrhoea. The swallowing of small amounts is unlikely to have any adverse effects. Salt is an essential constituent of the diet and provides important body electrolytes and is the source of hydrochloric acid present in gastric juices. The blood stream contains nearly 1% sodium chloride

Skin : Repeated or prolonged contact may result in dryness leading to mild irritation

Eyes : Dust may cause irritation

Mutagenicity : Not considered to be a mutagen

Carcinogenicity : Not considered to be a carcinogen

Reproductive Toxicity : No reproductive effects have been identified

Long Term Exposure : Repeated ingestion of excessive amounts may cause disturbance of body electrolyte and fluid balance

12 ECOLOGICAL INFORMATION

12.1 Toxicity:

A maximum value of 412 mg/l ensures the protection of all aquatic life (Source: Water Research Centre - September 1990)
Acute aquatic toxicity (Fish) 96hr-LC_{50} : 6750 mg/l
Acute aquatic toxicity (Daphnia) 48hr-EC_{50} : 2024 mg/l
Acute aquatic toxicity (Algae) 72hr-IC_{50} : 3014 mg/l
Subacute aquatic toxicity (Fish) : 433 mg/l
Subacute aquatic toxicity (Daphnia) : 1062 mg/l
BOD 5 day : 0 mg/l
COD : 0 mg/l
Earthworm toxicity : 1000 hg/cm_2

12.2 Persistence and degradeability

In water : Not applicable (quickly dissociates)

In soil : Not applicable (inorganic substance)

In sediment : Not applicable (inorganic substance)

12.3 Biocummulative potential: No potential for bioaccumulation

12.4 Mobility in Soil: Predicted to have high mobility in soil due to its high solubility in water

12.5 PBT and vPvB assessment: According to Annex XIII of REACH Regulation, inorganic substances do not require assessment

12.6 Other adverse effects: No other adverse effects are identified

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: If recycling spilled product is not practicable, dispose of in compliance with local or national regulations

Packaging: Where possible, recycling is preferred to disposal or incineration
Salt (sodium chloride) is not classified as hazardous for transport

14 TRANSPORT INFORMATION

TEL: 020 7250 1905
FAX: 020 7250 1913
email: sales@biachem.com
website: www.biachem.com

BOUNDARY HOUSE
91-93 CHARTERHOUSE STREET
LONDON EC1M 6HR
ENGLAND

14.1 UN Number: Not listed

14.2 UN proper shipping name; Not regulated

14.3 Transport hazard class - Land Transport : ADR/RID not restricted
- Inland Waterway Transport : ADN not regulated
- Sea Transport : IMO/IMDG not regulated
- Air Transport : ICAO-TI/IATA-DGR not regulated

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations

Not classified as dangerous for supply or conveyance

16 OTHER INFORMATION

16.1 Indication of changes

16.2 Abbreviations and acronyms

WEL : Workplace exposure limit
TWA : Time Weighted Average
PBT : Persistent, Bioaccumulative, Toxic
vPvB : very Persistent, very Bioaccumulative
ADR : European Agreement Concerning the International Carriage of Dangerous Goods by Road
RID : International Rule for Transport of Dangerous Substances by Rail
ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway
IMO/IMDG : International Maritime Organization/International Maritime Dangerous Goods Code
ICAO/IATA : International Civil Aviation Organization/International Air Transport Association

16.3 Further information

16.3.1 The substance(s) covered in this document do not legally require a Safety Data Sheet (SDS).

16.3.2 The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid.

To our best present knowledge the information given is correct and complete as of the date of this document and is given in good faith but without warranty, either expressed or implied, nor do we accept any liability in relation to this information or its use. This version of the SDS supersedes all previous versions.