Product : Salt Issue Number : 8

 Issue Date
 : 06/07/2015

 Supercedes
 : Issue N0.7 dated Feb. 2014

Last reviewed : 03/07/2015

British Salt Ltd

Cledford Lane Middlewich Cheshire CW10 0JP Telephone 01606 832881 Facsimile 01606 835999

BRITISH SALT

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name : Salt

Chemical Name : Sodium Chloride

Alternative Name : Vacuum salt, Compacted salt, Halite

Chemical Formula : NaCl

Trade Names

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

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

1.3 Company Details

Company Name : British Salt Limited

Address : Tata Chemicals Europe Limited Cledford Lane Middlewich Cheshire

CW10 0JP

Telephone : +44 (0)1606 832881 Fax : +44 (0)1606 835999

Web : www.british-salt.co.uk www.tatachemicals.com/europe

E-mail address of competent person : <u>msds-tce@tatachemicals.com</u>

1.4 Emergency Telephone

Emergency Telephone No. (Office : +44 (0)1606 832881

hours)

(out of Hours) : +44 (0)1606 839241

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

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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 Ingredients

contains no Hazardous Ingredients in accordance with EC Regulation 1907/2006

4.0 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 FIGHTING 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 800oc), 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

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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

Protective measures

7.1.1 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)
- Advice on general occupational hygiene normal good handling and housekeeping practice is adequate

7.1.2 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%

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: Respirable Dust is:

10mg/m3 (8hr TWA) 4mg/m3 (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

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· 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 : 802oc Boiling point : 1413oc

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 @ 747oc
Vapour Density : not applicable

Relative density : up to 2.165 g cm-3 @20oc

Water solubility : 35.9 g/100g @ 0oc ; 39.2 g/100g @ 100oc

Partition coefficient : not applicable
Auto-ignition temperature : non-flammable
Decomposition temperature : no available data
Viscosity : not applicable (solid)
Explosive properties : not applicable

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

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 800oc

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II. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity

Inhalation : high concentrations of dust may be irritant to the

respiratory tract

Ingestion : : Oral LD50, 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-LC50 6750 mg/l Acute aquatic toxicity (Daphnia) 48hr-EC50 2024 mg/l 3014 mg/l Acute aquatic toxicity (Algae) 72hr-IC50 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/cm2

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 asses

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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

14. TRANSPORT INFORMATION

14.1 UN Number

· not listed

14.2 UN proper shipping name

· not regulated

14.3 Transport hazard class

Land Transport
 Inland Waterway
 Transport
 Sea Transport
 MO/IMDG
 not regulated
 not regulated
 not regulated
 not regulated
 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

The new Issue updates the Safety Data Sheet in accordance with Annex II of the REACH Regulation (EC) (a) 1907/2006 and also to include the Classification, Labelling and Packaging (CLP) Regulation (EC) 1272/2008

(b) Section 1 – change of company ownership and certain contact details

Issue No. 7 Date of Issue: 06-07-2015 - supercedes Issue No. 6 Date of Issue: June 2011

16.2 Abbreviations and acronyms

WEL : Workplace exposure limit
TWA : Time Weighted Average

PBT : Persistent, Bioaccumulative, Toxic vPvB

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

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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).
 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
 16.3.2 named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be
- 16.3.2 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.

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