

# **Material Safety Data Sheet**

In accordance with Annex II of Regulation EC 1907/2006(REACH) Regulation (EC) 1272/2008 and Regulation (EC) 453/2010

Date prepared: 15/12/14 Date revised: 14/12/14

# 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, Granular, Pure Dried Vacuum and
	Undried Vacuum, Granular Tablets, De-icing, Marine Salt, Rock Salt,
Salt Blocks,	
	Pure Dried Evaporated, Sodium chloride. PDV
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, De-Icing

#### **1.2.1** Users advised against

No uses advised against have been identified



# **1.3 Company details**

Company Name:	NGS
Address:	Head Office
	Rushington Business Park
	Chapel Lane
	Southampton
	SO14 0ER
Telephone Number	0845 604 5459
Email:	rak@ngs.co.uk

# 1.4 Emergency Phone Number: 08456045459

# **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

#### 2.2.2 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:	Sodium Chloride
Formula:	Nacl
CAS Number:	7647-14/5
EC Number:	231-598-3
Wt. Percent	>97%w/w (on dry basis)

#### **3.2 Hazardous Ingredients**

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

# 4. First Aid Measures

# 4.1 Description of first aid measuresInhalation:Remove patient from exposure.Skin Contact:Wash skin with water. eyelidsEye Contact:Irrigate with eyewash solution or clean water, holding the eyelids<br/>apart, for at least<br/>10 minutes. If symptoms develop, obtain medical attention.Ingestion:Wash out mouth with water and give 200-300ml (half a pint) of<br/>water to drink.<br/>Obtain medical attention if ill-effects occur. DO NOT induce vomitingFurther Medical Treatment:Symptomatic treatment and supportive therapy as indicated.

# 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

#### 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)

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#### 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%

# 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/m3 (8hr TWA)

Respirable Dust is: 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

Eye/face protection

Wear chemical safety goggles in situations where contact with the eyes may occur

#### 8.2.3 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

#### 8.2.4 Skin/body protection

No special protective equipment required skin should be washed to remove salt

#### 8.2.5 Respiratory protection

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

#### 8.2.6 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:	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
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

# **11. TOXICOLOGICAL INFORMATION**

#### **11.1 Information on toxicological effects**

Acute Toxity

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
Acute aquatic toxicity (Algae):	72hr-IC50: 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/cm2

# **12.2 Persistence and degradability**

PIn 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

# **14. Transport Information**

Salt (sodium chloride) is not classified as hazardous for transport

#### 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**

(a) The new Issue updates the Safety Data Sheet in accordance with Annex II of the REACH Regulation

(EC) 1907/2006 and also to include the Classification, Labelling and Packaging (CLP) Regulation (EC)

1272/2008

Issue No. 3 Date of Issue: 15-02-2013 - supersedes Issue No. 2 Date of Issue: February 2011

# **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
RID	International Rule for Transport of Dangerous Substances by Rail
ADN	European Agreement concerning the International Carriage of Dangerous Goods by
	Inland
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.