

MATERIAL SAFETY DATA SHEET

SODIUM CHLORIDE

1 PRODUCT & COMPANY IDENTIFICATION

PRODUCT	Sodium Chloride
Product Name	BULK ROAD SALT
Item Code	SDSRS
Cas #	7647-14-5,
Product Use	De-icer,
Manufacturer(s)	Sodium Chloride: Broken Arrow 8916 Hwy 40 Lake Point , Ut. 84074
Supplier	FYVE STAR, Inc.® 5442 Wells Park Road West Jordan, Utah 84084

2 HAZARDS IDENTIFICATION

Emergency Overview	CAUTION EYE & SKIN IRRITANT
Potential Short Term health effects	
Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Eyes	May cause irritation.
Skin	May cause irritation.
Inhalation	Dusts of this product may cause irriation of the nose throat, and respiratory tract.
Ingestion	May cause stomach distress, nausea or vomiting.
Target Organs	Eyes. Skin. Respiratory system.
Chronic Effects	Prolonged or repeated exposure can cayuse drying, defatting and dermatitis
Signs and Symptoms	Symptoms may include redness, edema, drying, defatting and cracking of Skin. Sysptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3 COMPOSITION/INFORMATION on INGREDIENTS

Ingredient(s)	CAS#	Percent
Sodium Chloride	7647-14-5	100%

4 FIRST AID MEASURES

First Aid Procedures	
Eye Contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists
Skin Contact	Flush with cool water. Wash with soap & water. Obtain medical attention if irriation persists.
Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Ingestions	Do not induce vomiting. Rinse mouth with water, then drink 1 to 2 glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.
Notes to Physician	Symptoms may be delayer
General advice	None Available

5 FIRE FIGHTING MEASURES

Flamable properties	Not flammable by WHMIS/OSHA criteria
Flash point & method	N.A
Flamable limits	N.A
Extinguishing Media	
Suitable extinguishing media	Treat for surround material, water spray, dry chemicals, foam or carbon dioxide.
Unsuitable extinguishing media	Not Available
Protection of FireFighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Unusual Fire & Explosion Hazards	None expected, but avoid the build up of dye dust clouds which could be explosive.

NFPA FIRE HAZARDS		Minimal	0
Health:	1	Slight	1
Fire:	1	Moderate	2
Reactivity:	0	Serious	3
Specific:	N.A.	Severe	4

6 ACCIDENTAL RELEASE MEASURES

Personal precautions	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Methods of containment	None Necessary
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Discard containers except for storage and shipment of original product.

7 HANDLING & STORAGE

Handling	Avoid breathing dusts from this material
Storage	Keep out of reach of children. Keep containers tightly closed in a cool, well-ventilated place.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits	
Ingredient(s)	Exposure Limits
Sodium Chloride	ACGIH-TLV not established OSAH-PEL Not Established
Engineering Controls	TWA PEL: No specific limits have been established for magnesium chloride & sodium chloride (a soluble substance). As a guideline, OSHA has established the following limits which are generally recognized for inert or nuisance dust. Particulates not otherwise regulated (PNOR): 5mg/cu.m. Respirable dust 8-hour TWA PEL, 15mg/cu.m. Total dust 8-hour TWA PEL. TWA TLV: No specific limits have been established for magnesium chloride & sodium chloride (a soluble substance). As a guideline, ACGIH has established the following limits which are generally recognized for inert or nuisance dust. Particulates not otherwise classified (PNOC): 10mg/cu.m. Respirable dust 8-hour TWA TLV, 15mg/cu.m. Total dust 8-hour TWA TLV. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limits.
Personal Protective equipment	
Eye/Face protection	Safety glasses
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin & Body protection	As required by employer code
Respiratory protection	Where exposure guideline may be exceeded, use an approved NIOSH respirator or NIOSH approved filtering facepiece
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks & immediately after handling product.

9 PHYSICAL & CHEMICAL PROPERTIES

Appearance	Crystalline
color	Clear/White
Form	Crystalline
Odor	Oderless
Odor Threshold	Not available
Physical State	Solid
pH	6-8 neutral
Melting Point	800.9 C (1473.8 F)
Freezing Point	Not available
Boiling Point	1413 C (2575.4 F)
Flash Point	Not available
Evaporation Rate	Not available
Flammability limits in air, lower,% by volume	Not applicable
Flammability limits in air, upper,% by volume	Not applicable
Vapor pressure	0.1 kPa (1 mmhg)@ 865 C
Vapor density	Not applicalbe
Specific gravity	2.17 (H@) @20 C
Relative density	2.17 g/cm3
Octanol/Water coefficient	Not available
Solubility (H2O)	36g/100g H2O @ 20 C
Auto-ignition temperature	Not available
Percent volatile	0% w/w
Molecular weight	58.4400 g/mole
Molecular formula	NaCl,

10 CHEMICAL STABILITY REACTIVITY INFORMATION

Chemcial Stability	Stable under recommended storage conditions
Conditions to avoid	Do not mix with incompatible materials
Incompatible materials	Reactive with oxidizing agents,acids, metals in presence of moisture,lithium, bromine, trifloride
Hazardous decomposition products	May include and are not limited to : Halogenated compounds. Hydrogen chloride
Possibility of hazardous reactions	

11 TOXICOLOGICAL INFORMATION

Component analysis-LC50	
Ingredients	LC50
Sodium Chloride	>21000 mg/m3 rat
Component analysis-Oral LD50	
Ingredients	LD50
Sodium Chloride	3000mg/kg rat
Effects of acute exposure	
Eye	May cause irritation
Skin	May cause irritation
Inhalation	Dust of this product may cause irritation of the nose, throat, & respiratory tract
Ingestion	May cause stomach distress, nausea or vomiting
Sensitization	Not classified ir listed by IARC, NTP, OSHA, and ACGIH
Chronic effects	Not classified ir listed by IARC, NTP, OSHA, and ACGIH
Carcinogenicity	Not classified ir listed by IARC, NTP, OSHA, and ACGIH
Mutagenicity	Not classified ir listed by IARC, NTP, OSHA, and ACGIH
Reproductive effects	Not classified ir listed by IARC, NTP, OSHA, and ACGIH
Teratogenicity	Not classified ir listed by IARC, NTP, OSHA, and ACGIH

12 ECOLOGICAL INFORMATION

Ecotoxicity	Maybe harmful to freshwater aquatic species and to plants that are not tolerant
Enviromental effects	Not available
Aquatic toxicity	Not available
Persistence/Degradability	Not available
Bioaccumulation/ accumulation	Not available
Partition coefficient	Not available
Mobility in enviromental media	Not available
Chemical fate information	Not available

13 DISPOSAL CONSIDERATIONS

Waste codes	Not available
Disposal instruction	Waste must be disposed of in accordance with federal, state, & local environmental controls
Waste from residues/unused products	Not available
Contaminated packaging	Not available

14 TRANSPORTATION INFORMATION

Department of Transportation (DOT)	Not regulated as dangerous goods
Transportation of Dangerous Goods (TDG)	Not regulated as dangerous goods

15 REGULATORY INFORMATION

Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the controlled products regulations and the MSDS contains all the information required by the Controlled products regulations and the MSDS contains all the information required by the Controlled
US Federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA hazard Communication Standard, 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances- Not Applicable
Occupational Safety & Health Administration (OSHA) 29 CFR 1910.1200 hazardous chemical	No
CERCLA (Superfund) reportable quantity	None
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
Hazard Categories	Immediate Hazard- No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
Section 302 Extremely hazardous substance	No
Section 311 hazardous chemical	No
Clean Air Act (CAA)	Not available
Clean Water Act (CWA)	Not available
Safe Drinking Act (SDWA)	Not available
Drug Enforcement Agency (DEA)	Not available
Food and Drug Administration (FDA)	Not available
WHMIS status	Not Controlled
State Regulations	This product does not contain a chemical known to the State of California to cause cancer birth defects or other reproductive harm.

Inventory name	Country(s) or Region	Inventory Name	On Inventory (yes/No)*
	Canada	Domestic Substances List (DSL)	YES
	Canada	Non-Domestic Substances List (NDSL)	NO
	United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	YES

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16 OTHER INFORMATION

DISCLAIMER

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.