# SAFETY DATA SHEET



1. Identification

Product identifier Champions Choice® Sulfur Blocks

Other means of identification

SDS number NC15

Synonyms Sodium Chloride (Salt) Blended with Sulfur. \* Champions Choice® Sulfur Salt Blocks. \*

Champions Choice Sulfur Blocks.

Recommended use Salt may be intended for food or animal feed (agricultural) as well as several industrial applications

including deicing and water conditioning.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company nameCargill IncorporatedAddressMinneapolis, MN 55440

Telephone1-888-385-7258Websitewww.cargillsalt.com

**Emergency telephone** 

number

CHEMTREC (800) 424-9300

# 2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

**Hazard statement** The mixture does not meet the criteria for classification.

**Precautionary statement** 

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

# 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Sodium Chloride	7647-14-5	97
Sulfur	7704-34-9	3

### 4. First-aid measures

**Inhalation** If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a

physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Give one or two glasses of water if patient is alert and able to swallow. Get medical attention if

symptoms occur.

Champions Choice® Sulfur Blocks SDS US

Most important

symptoms/effects, acute and

delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special

treatment needed

Treat symptomatically.

**General information** 

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

# 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Use water spray to cool unopened containers.

**Specific methods**Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards** This product is not flammable or combustible.

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Avoid release to the environment. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

**Environmental precautions** 

Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes. Avoid contact with water and moisture. Keep away from strong acids. May evolve chlorine gas when in contact with strong acids. Hydrogen chloride release above 1400°F. Practice good housekeeping.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Becomes hygroscopic at 70-75% relative humidity. Avoid humid or wet conditions as product will cake and become hard.

# 8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

**Biological limit values** 

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

controls

Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

#### Individual protection measures, such as personal protective equipment

Eye/face protection

Unvented, tight fitting goggles should be worn in dusty areas.

Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing.

Issue date: 29-August-2014

Respiratory protection

922323 Version #: 01 Revision date: -

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Champions Choice® Sulfur Blocks

# 9. Physical and chemical properties

Appearance Yellow colored compressed 50-pound blocks.

Physical state Solid.

Form Crystalline solid.
Color Greenish-brown.
Odor Not available.
Odor threshold Not available.
pH Not available.

Melting point/freezing point 1473.8 °F (801 °C)

Initial boiling point and boiling 2669 °F (1465 °C) (760 mmHg)

range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

**Vapor pressure** 2.4 mm Hg (1376.6 °F (747 °C))

Vapor density Not available.

Relative density 2.16 (H2O = 1)

Solubility(ies)

Solubility (water) 26.4 %

Partition coefficient

(n-octanol/water)

Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Bulk density 70 - 83 lb/ft<sup>3</sup>

Molecular formulaNaClMolecular weight58.44pH in aqueous solution6 - 10

## 10. Stability and reactivity

**Reactivity**The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

**Incompatible materials** Avoid contact with strong acids. Becomes corrosive to metals when wet.

Hazardous decomposition

May evolve chlorine gas when in contact with strong acids. At high temperatures, decomposition

products may result in formation of oxides of the trace minerals present in the salt.

# 11. Toxicological information

Information on likely routes of exposure

**Inhalation** Inhalation of dusts may cause respiratory irritation.

Champions Choice® Sulfur Blocks
922323 Version #: 01 Revision date: - Issue date: 29-August-2014

**Skin contact** Prolonged or repeated skin contact may cause irritation. If applied to damaged skin, absorption

can occur with effects similar to those via ingestion.

**Eye contact**Dust in the eyes will cause irritation. **Ingestion**Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Eye and skin contact: Exposure may cause temporary irritation, redness, or discomfort. For ingestion, consuming less than a few grams would not be harmful. The following effects were observed after ingesting an excessive quantity: nausea and vomiting, diarrhea, cramps, restlessness, irritability, dehydration, water retention, nose bleed, gastrointestinal tract damage, fever, sweating, sunken eyes, high blood pressure, muscle weakness, dry mouth and nose, shock, cerebral edema (fluid on brain), pulmonary edema (fluid in lungs), blood cell shrinkage, and brain damage (due to dehydration of brain cells). Death is generally due to cardiovascular collapse or CNS damage.

#### Information on toxicological effects

Acute toxicity In some cases of confirmed hypertension, ingestion may result in elevated blood pressure.

Ingestion of large amounts (greater than 0.1 pound) can cause gastrointestinal upset and irritation of the stomach. Rare cases of over exposure can lead to systemic toxicity related to the binding

of ionized blood calcium.

Components	Species	Test Results	
Sodium Chloride (CAS 764	47-14-5)		
Acute			
Oral			
LD50	Rat	3000 mg/kg	
Sulfur (CAS 7704-34-9)			
Acute			
Dermal			
LD50	Rat	> 2000 mg/kg, 24 Hours	
Inhalation			
LC50	Rat	> 5.43 g/m3, 4 Hours	
Oral			
LD50	Rat	> 2200 mg/kg	

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Dust in the eyes will cause irritation.

Respiratory or skin sensitization

**Respiratory sensitization** Not available.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity**This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

oxicity - Not classified.

Specific target organ toxicity -

repeated exposure Aspiration hazard

Due to the physical form of the product it is not an aspiration hazard.

12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

SDS US

Persistence and degradability 
No data is available on the degradability of this product.

Bioaccumulative potentialNo data available.Mobility in soilNo data available.Other adverse effectsNone known.

Champions Choice® Sulfur Blocks

# 13. Disposal considerations

**Disposal instructions**Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Local disposal regulations**Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

### 14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

# 15. Regulatory information

**US** federal regulations All components are on the U.S. EPA TSCA Inventory List.

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

**US** state regulations

**US. Massachusetts RTK - Substance List** 

Sulfur (CAS 7704-34-9)

US. New Jersey Worker and Community Right-to-Know Act

Sulfur (CAS 7704-34-9)

## US. Pennsylvania Worker and Community Right-to-Know Law

Sulfur (CAS 7704-34-9)

### **US. Rhode Island RTK**

Not regulated.

#### **US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

<sup>\*</sup>A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

# 16. Other information, including date of preparation or last revision

**Issue date** 29-August-2014

Revision date - 01

United States & Puerto Rico

HMIS® ratings Health: 1

Flammability: 0 Physical hazard: 0 Personal protection: A

**Disclaimer** 

All statements, technical information and recommendations contained herein 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 material described.

It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations. It is also the responsibility of the user to maintain a safe workplace. 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 not intended as a license to operate under, or a recommendation to practice or infringe upon any patent of this Company or others covering any process, composition of matter or use.

Champions Choice® Sulfur Blocks

SDS US

Yes

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).