SAFETY DATA SHEET

1. Identification

Product identifier **Champions Choice® Trace Mineral with Selenium**

Other means of identification

SDS number NC13

Synonyms Champions Choice Trace Mineral with Selenium. * Champions Choice® Trace Mineral Salt with Selenium. * Sodium Chloride (Salt) with Trace Minerals. * Champions Choice® Sheep Salt with Selenium.

Recommended use Salt is intended for animal food (agricultural) applications.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Cargill Incorporated

Address Minneapolis, MN 55440

Telephone 1-888-385-7258

Website www.cargillsalt.com

Emergency telephone number CHEMTREC (800) 424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Sensitization, skin Category 1

OSHA defined hazards Not classified.

Label elements

Signal word Warning

Hazard statement May cause an allergic skin reaction.

Precautionary statement

Prevention Avoid breathing dust/fume. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves.

Response If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical description Alkali Metal/Halide

Chemical name	CAS number	%
Sodium Chloride	7647-14-5	98.116-98.13
Ferrous Carbonate	563-71-3	0.53
Zinc oxide	1314-13-2	0.49

Manganese oxide	1344-43-0	0.33
Sodium Selenite	10102-18-8	0.23
Iron oxide	1309-37-1	0.112-0.252
Copper Sulfate	7758-98-7	0-0.12
White mineral oil (Viscosity >7 =<20.5 mm2/s)	8042-47-5	0.02
Calcium Iodate	7789-80-2	0.01
Cobalt carbonate	513-79-1	0.01
Artificial Flavor		0.01
FD & C Blue 1l	68921-42-6	<=0.01

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 Remove contaminated clothing immediately and wash skin 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.

Most important symptoms/effects, acute and delayed Direct contact with eyes may cause temporary irritation. Rash. Dermatitis. May cause an allergic skin reaction.

Indication of immediate medical attention and special treatment needed Treat symptomatically. Symptoms may be delayed.

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

5. Fire-fighting measures

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

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed such as: Carbon oxides (COx). Hydrogen chloride gas. Metal oxides.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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. Provide adequate ventilation. 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 release to the environment. Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

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. 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

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Iron oxide (CAS 1309-37-1)	PEL	10 mg/m3	Fume.
Manganese oxide (CAS 1344-43-0)	Ceiling	5 mg/m3	
Sodium Selenite (CAS 10102-18-8)	PEL	0.2 mg/m3	
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)	PEL	5 mg/m3	Mist.
Zinc oxide (CAS 1314-13-2)	PEL	5 mg/m3	Fume.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Cobalt carbonate (CAS 513-79-1)	TWA	0.02 mg/m3	
Copper Sulfate (CAS 7758-98-7)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
FD & C Blue 1l (CAS 68921-42-6)	TWA	1 mg/m3	Respirable fraction.
Ferrous Carbonate (CAS 563-71-3)	TWA	1 mg/m3	
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Manganese oxide (CAS 1344-43-0)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.
Sodium Selenite (CAS 10102-18-8)	TWA	0.2 mg/m3	
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction.
	TWA	2 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Copper Sulfate (CAS 7758-98-7)	TWA	1 mg/m3	Dust and mist.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
		0.1 mg/m3	Fume.
FD & C Blue 1l (CAS 68921-42-6)	TWA	2 mg/m3	
Ferrous Carbonate (CAS 563-71-3)	TWA	1 mg/m3	
Iron oxide (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
Manganese oxide (CAS 1344-43-0)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.
Sodium Selenite (CAS 10102-18-8)	TWA	0.2 mg/m3	
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Zinc oxide (CAS 1314-13-2)	Ceiling	15 mg/m3	Dust.
	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Dust.
		5 mg/m3	Fume.

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Cobalt carbonate (CAS 513-79-1)	15 µg/l	Cobalt	Urine	*

* - For sampling details, please see the source document.

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. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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.

Skin protection

Other Wear suitable protective clothing.

Respiratory protection 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. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

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.

9. Physical and chemical properties

Appearance Green colored granular solid or compressed 50-pound blocks. (Sheep Salt is red in color.)

Physical state Solid.

Form Colored 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 range	2669 °F (1465 °C) (760 mmHg) (760 mm Hg)
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/ft³
Molecular formula	NaCl and Trace Minerals (including Selenium)
Molecular weight	58.44
pH in aqueous solution	6.7 - 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 products	At high temperatures, decomposition 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.
Skin contact	May cause an allergic skin reaction. 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

Rash. Dermatitis. May cause an allergic skin reaction. May cause minor irritation on eye 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

May cause an allergic skin reaction. In some cases of confirmed hypertension, ingestion may result in elevated blood pressure.

Components	Species	Test Results
Copper Sulfate (CAS 7758-98-7)		
Acute		
Oral		
LD50	Rat	300 mg/kg
Sodium Chloride (CAS 7647-14-5)		
Acute		
Oral		
LD50	Rat	3000 mg/kg
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
Aerosol		
LC50	Rat	> 5 mg/l
Oral		
LD50	Rat	> 5000 mg/kg
Zinc oxide (CAS 1314-13-2)		
Acute		
Oral		
LD50	Rat	> 5 g/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

May cause an allergic skin reaction.

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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Iron oxide (CAS 1309-37-1)	3 Not classifiable as to carcinogenicity to humans.
Sodium Selenite (CAS 10102-18-8)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Cobalt carbonate (CAS 513-79-1)	Reasonably Anticipated to be a Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity

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

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

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

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Copper Sulfate (CAS 7758-98-7)			
Aquatic			
Crustacea	EC50	Amphipod (Crangonyx pseudogracilis)	2.21 - 2.72 mg/l, 48 hours
		Calanoid copepod (Acartia clausi)	0.034 mg/l, 48 hours
	LC50	Water flea (Ceriodaphnia dubia)	0.0091 mg/l, 96 hours
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)			
Aquatic			
Acute			
Crustacea	LL50	Invertebrates (Invertebrates)	100 mg/l
Fish	LL50	Fish	10 mg/l
Zinc oxide (CAS 1314-13-2)			
Aquatic			
Crustacea	LC50	Water flea (Daphnia magna)	0.098 mg/l, 48 Hours

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

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects None known.

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 the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Cobalt carbonate (CAS 513-79-1)	Listed.
Copper Sulfate (CAS 7758-98-7)	Listed.
Manganese oxide (CAS 1344-43-0)	Listed.

Sodium Selenite (CAS 10102-18-8) Listed.
Zinc oxide (CAS 1314-13-2) Listed.

SARA 304 Emergency release notification

Sodium Selenite (CAS 10102-18-8) 100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Sodium Selenite	10102-18-8	100		100	10000

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Respiratory or skin sensitization

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Cobalt carbonate (CAS 513-79-1)
Manganese oxide (CAS 1344-43-0)
Sodium Selenite (CAS 10102-18-8)

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Copper Sulfate (CAS 7758-98-7)
Iron oxide (CAS 1309-37-1)
Sodium Selenite (CAS 10102-18-8)
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)
Zinc oxide (CAS 1314-13-2)

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

Cobalt carbonate (CAS 513-79-1)
Copper Sulfate (CAS 7758-98-7)
Iron oxide (CAS 1309-37-1)
Manganese oxide (CAS 1344-43-0)
Sodium Selenite (CAS 10102-18-8)
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)
Zinc oxide (CAS 1314-13-2)

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

Cobalt carbonate (CAS 513-79-1)
Copper Sulfate (CAS 7758-98-7)
FD & C Blue 1l (CAS 68921-42-6)
Ferrous Carbonate (CAS 563-71-3)
Iron oxide (CAS 1309-37-1)
Manganese oxide (CAS 1344-43-0)
Sodium Selenite (CAS 10102-18-8)
White mineral oil (Viscosity >7 =<20.5 mm2/s) (CAS 8042-47-5)
Zinc oxide (CAS 1314-13-2)

US. Rhode Island RTK

Ferrous Carbonate (CAS 563-71-3)
Iron oxide (CAS 1309-37-1)
Sodium Selenite (CAS 10102-18-8)
Zinc oxide (CAS 1314-13-2)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Cobalt carbonate (CAS 513-79-1)
Sodium Selenite (CAS 10102-18-8)

International Inventories

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

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

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

Issue date 14-September-2014

Revision date 21-May-2018

Version # 02

HMIS® ratings
Health: 1*
Flammability: 0
Physical hazard: 0
Personal protection: A

Disclaimer

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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.

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