



SAFETY DATA SHEET

1. Identification

Product identifier	Iodized Salt Food Grade
Other means of identification	
SDS number	I1
Synonyms	Sodium Chloride, Calcium Phosphate Tribasic, Magnesium Carbonate, Sodium Silicoaluminate, Dextrose, Sodium Thiosulfate, Sodium Bicarbonate, Sodium Ferrocyanide Decahydrate, Potassium Iodide. * Iodized Hi-Grade Evaporated Salt, Purified Iodized Sea Salt * Fine Blending Iodized Evaporated Salt * Iodized Salt Food Grade
Recommended use	Salt is intended for food grade 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	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.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical description	Alkali Metal/Halide		
Chemical name	CAS number	%	
Sodium Chloride	7647-14-5	99.0-99.9709	
Calcium Phosphate, Tribasic	7758-87-4	0.0-1.0	
Sodium Silicoaluminate	1344-00-9	0.0-1.0	
Magnesium carbonate	546-93-0	0.0-0.6	
Potassium Iodide	7681-11-0	0.06-0.010	

Dextrose	50-99-7	0.0-0.06
Sodium thiosulfate	7772-98-7	0.0-0.025
Sodium bicarbonate	144-55-8	0.0-0.01
Sodium Ferrocyanide Decahydrate	13601-19-9	0.0-0.0013

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.
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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	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 such as: Carbon oxides (CO _x). 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. 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

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

Components	Type	Value	Form
Magnesium carbonate (CAS 546-93-0)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Potassium Iodide (CAS 7681-11-0)	TWA	0.01 ppm	Inhalable fraction and vapor.
Sodium Silicoaluminate (CAS 1344-00-9)	TWA	1 mg/m ³	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Magnesium carbonate (CAS 546-93-0)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total
Sodium Silicoaluminate (CAS 1344-00-9)	TWA	2 mg/m ³	

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.

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

White crystalline solid

Physical state

Solid.

Form

Crystalline solid.

Color

White.

Odor

Halogen odor

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)

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 53 - 83 lb/ft³

Molecular formula NaCl, 3Ca₃(PO₄)₂·Ca(OH)₂, (MgCO₃)₄·Mg(OH)₂·5H₂O, Na₂O·Al₂O₃·13.2SiO₂, C₆H₁₂O₆, Na₂S₂O₃, NaHCO₃, Na₄Fe(CN)₆·10H₂O, KI

Molecular weight 58.44, 1004.7, 480, 957.05, 180.16, 158.13, 84.00, 484.06, 166.02

pH in aqueous solution 6.7 - 7.3

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 May evolve chlorine gas when in contact with strong acids.

11. Toxicological information

Information on likely routes of exposure

Inhalation Inhalation of dusts may cause respiratory irritation.

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	
Dextrose (CAS 50-99-7)			
Acute			
Dermal			
LC66		> 2000 mg/kg	
Inhalation			
<i>Dust</i>			
LC50		> 20 mg/l	
Oral			
LD50	Rat	25800 mg/kg	
Sodium bicarbonate (CAS 144-55-8)			
Acute			
Oral			
LD50	Rat	4220 mg/kg	
Sodium Chloride (CAS 7647-14-5)			
Acute			
Oral			
LD50	Rat	3000 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.		
IARC Monographs. Overall Evaluation of Carcinogenicity			
Not listed.			
NTP Report on Carcinogens			
Not listed.			
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	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.		
Components			
Species			
Test Results			
Sodium bicarbonate (CAS 144-55-8)			
Aquatic			
Crustacea	EC50	Daphnia	2350 mg/l, 48 hours
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	8600 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
Partition coefficient n-octanol / water (log Kow)			
Dextrose (CAS 50-99-7)			-3.24
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 not known to be 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)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

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 (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Magnesium carbonate (CAS 546-93-0)

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

Magnesium carbonate (CAS 546-93-0)

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

Sodium Silicoaluminate (CAS 1344-00-9)

US. Rhode Island RTK

Magnesium carbonate (CAS 546-93-0)

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))

Magnesium carbonate (CAS 546-93-0)

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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
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 15-September-2014

Revision date 21-May-2018

Version # 02

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

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