

# SAFETY DATA SHEET

## 1. SUBSTANCE AND SOURCE IDENTIFICATION

**Product Identifier** 

SRM Number: 3530

SRM Name: Iodized Table Salt (Iodide)
Other Means of Identification: Not applicable.

#### Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is intended primarily for validation of methods for the determination of iodide in an iodized table salt or similar material. This SRM can also be used for quality assurance when assigning values to in-house reference materials. A unit of SRM 3530 consists of one bottle containing approximately 200 g of a commercially available iodized table salt sealed inside an aluminized polyethylene terephthalate (PET) pouch containing an oxygen absorber pack.

## **Company Information**

National Institute of Standards and Technology Standard Reference Materials Program 100 Bureau Drive, Stop 2300 Gaithersburg, Maryland 20899-2300

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# 2. HAZARDS IDENTIFICATION

Classification

Physical Hazard: Not classified.

**Health Hazard:** Serious Eye Damage/Irritation Category 2B

**Label Elements** 

**Symbol** No symbol

Signal Word

Warning

**Hazard Statement(s):** 

H320 Causes eye irritation.

**Precautionary Statement(s):** 

P264 Wash hands thoroughly after handling.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical attention.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

## 3. COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

Substance: Sodium chloride (iodized)

Other Designations: Sodium monochloride; table salt; sea salt; common salt

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Sodium chloride	7647-14-5	231-598-3	100

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#### 4. FIRST AID MEASURES

### **Description of First Aid Measures:**

**Inhalation:** If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

**Skin Contact:** Wash skin with soap and water for at least 15 minutes. Thoroughly clean and dry contaminated clothing before reuse.

Eye Contact: Flush eyes with water for at least 15 minutes. If necessary, seek medical attention.

**Ingestion:** If a large amount is swallowed, get medical attention.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation.

**Indication of any immediate medical attention and special treatment needed, if necessary:** If any of the above symptoms are present, seek medical attention if needed.

#### 5. FIRE FIGHTING MEASURES

**Fire and Explosion Hazards:** Negligible fire hazard. See Section 9, "Physical and Chemical Properties" for flammability properties.

#### **Extinguishing Media:**

Suitable: Use extinguishing agents appropriate for surrounding fire.

Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

**Special Protective Equipment and Precautions for Fire-Fighters:** Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

**NFPA Ratings** (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1 Fire = 0 Reactivity = 0

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:** Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Collect spilled material in appropriate container for disposal.

#### 7. HANDLING AND STORAGE

Safe Handling Precautions: Minimize dust generation. See Section 8, "Exposure Controls and Personal Protection".

**Storage:** Store and handling in accordance with all current regulations and standards. Keep separated from incompatible substances (see Section 10, "Stability and Reactivity").

#### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Limits:** No occupational exposure limits have been established for this material. The exposure limits for Particulates Not Otherwise Regulated are applicable.

OSHA (PEL): 15 mg/m<sup>3</sup> (TWA, total particulates)

5 mg/m<sup>3</sup> (TWA, respirable particulates)

NIOSH (REL): 10 mg/m<sup>3</sup> (TWA, total particulates)

5 mg/m<sup>3</sup> (TWA, respirable particulates)

**Engineering Controls:** Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

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**Personal Protection:** In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

**Respiratory Protection:** If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

**Eye/Face Protection:** Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

**Skin and Body Protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Descriptive Properties:</b>	Sodium chloride			
Appearance	colorless to white hygroscopic crystalline			
(physical state, color, etc.):	powder			
Molecular Formula:	NaCl			
Molar Mass (g/mol):	58.44			
Odor:	odorless			
Odor threshold:	not available			
pH (solution):	5.8 to 8.5 (5 % solution)			
Evaporation rate:	not applicable			
Melting point/freezing point (°C):	801 (1474 °F)			
Relative Density (g/mL):	2.165			
Vapor Pressure (mmHg):	not applicable			
Vapor Density (air = 1):	not applicable			
Viscosity (cP):	not applicable			
Solubility(ies):	water soluble (35.7 % at 0 °C);			
	soluble: glycerol;			
	insoluble: hydrochloric acid			
Partition coefficient (n-octanol/water):	not available			
Particle Size	not available			
Thermal Stability Properties:				
<b>Autoignition Temperature (°C):</b>	not applicable			
Thermal Decomposition (°C):	not available			
Initial boiling point and boiling range (°C):	1413 (2575 °F)			
Explosive Limits, LEL (Volume %):	not applicable			
Explosive Limits, UEL (Volume %):	not applicable			
Flash Point (°C)	not applicable			
Flammability (solid, gas):	not available			
10. STABILITY AND REACTIVITY				
Reactivity: Stable at normal temperatures and pressur	re.			
Stability: X Stable Uns	table			
Possible Hazardous Reactions: None listed.				
Conditions to Avoid: None reported.				
Incompatible Materials: Metals, combustible materials, halogenated compounds.				
Fire/Explosion Information: See Section 5, "Fire Fighting Measures".				
<b>Hazardous Decomposition:</b> Thermal decomposition will produce halogenated and chlorinated compounds, oxides of sodium.				
Hazardous Polymerization: Will Occur	X Will Not Occur			

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11. TOXICOLOGICAL INFORMATION	
Route of Exposure: X Inhalation X Skin Ingestion	
Symptoms Related to the Physical, Chemical and Toxicological Characteristics: May agg disorders.	ravate respiratory
Potential Health Effects (Acute, Chronic and Delayed):  Inhalation: May cause salty taste and cause irritation to the nose and throat; symptoms may dryness, and sore throat.	include coughing,
Skin Contact: May cause mild irritation.	
Eye Contact: Moderate irritation; concentrated solutions may cause a stinging sensation.	
<b>Ingestion:</b> Ingestion of large doses of hypertonic solutions may cause dryness of mucous violent inflammatory reaction in the gastrointestinal tract; ulceration may occur. Chronic in chloride may result in elevated blood pressure.	
Numerical Measures of Toxicity:	
Acute Toxicity: Not classified. Rat, Inhalation LD50: >42 g/m <sup>3</sup> (1 h) Rat, Oral LD50: 3000 mg/kg	
Skin Corrosion/Irritation: Not classified. Rabbit, Dermal (mild): 500 mg (24 h) Sodium chloride is classified by the EPA as Toxicity Category IV for mild skin irritation.	
Serious Eye Damage/Irritation: Category 2B Rabbit, Eyes (moderate): 100 mg (24 h), 500 mg (24 h) Sodium chloride is classified by the EPA as Toxicity Category III for moderate eye irritation.	on effects.
Respiratory Sensitization: Not classified; no data available.	
Skin Sensitization: Not classified; no data available.	
Germ Cell Mutagenicity: Not classified; no data available.	
Carcinogenicity: Not classified.	
Listed as a Carcinogen/Potential Carcinogen Yes X Sodium chloride is not listed by IARC, NTP or OSHA as a carcinogen.	No
Reproductive Toxicity: Not classified.  Human, Intraplacental TDLo: 27 mg/kg (pregnant 15 weeks) Rat, Oral TDLo: 145 g/kg (prior to copulation 7 d, pregnant 1 d to 22 d)	
Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.	
Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.	
Aspiration Hazard: Not classified; no data available.	
12. ECOLOGICAL INFORMATION	
Ecotoxicity Data:  Fish: Bluegill ( <i>Lepomis macrochirus</i> ) LC50 (flow-through): 5560 mg/L to 6080 mg/L (90 Invertebrate: Water flea ( <i>Daphnia magna</i> ) EC50 (static): 1000 mg/L (48 h)	5 h)
Persistence and Degradability: No data available.	
Bioaccumulative Potential: No bioaccumulation.	
Mobility in Soil: No data available.	
Other Adverse effects: No data available.	

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

13. DISPOSAL CONSIDERATIONS

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#### 14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: Not regulated by DOT or IATA.

#### 15. REGULATORY INFORMATION

#### **U.S. Regulations:**

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Section 313 (40 CFR 372.65): Not regulated.

OSHA Process Safety (29 CFR 1910.119): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH: Yes
CHRONIC HEALTH: No
FIRE: No
REACTIVE: No
PRESSURE: No

State Regulations: California Proposition 65: Not listed

U.S. TSCA Inventory: Listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations: WHMIS Information is not provided for this material.

## 16. OTHER INFORMATION

Issue Date: 09 September 2020

**Sources:** ChemAdvisor, Inc., SDS *Sodium Chloride*, 09 December 2015.

Hazardous Substances Data Bank, National Library of Medicine, *Sodium Chloride* CAS# 7647-14-5, Full Record, available at https://pubchem.ncbi.nlm.nih.gov/compound/5234 (accessed Sep 2020).

Center for Disease Control (CDC), NIOSH Pocket Guide to Chemical Hazards, *Particulates Not Otherwise Regulated*, available at https://www.cdc.gov/niosh/npg/npgd0480.html (accessed Sep 2020).

National Institute of Environmental Health Sciences, National Institutes of Health, *Appendix B ICCVAM Summary Review Document: The Low Volume Eye Test*; Appendix to NIH Publication Number 10-7515; available at https://www.niehs.nih.gov/ (accessed Sep 2020).

EPA, Office of Prevention, Pesticides, Environmental Protection and Toxic Substances, *R.E.D. FACTS*, Publication: EPA-738-F-93-015, September 1993; available at https://archive.epa.gov/pesticides/reregistration/web/pdf/4051fact.pdf (accessed Sep 2020).

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# **Key of Acronyms:**

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response,	PEL	Permissible Exposure Limit
CERCLA	Compensation, and Liability Act	ILL	Termissione Exposure Emili
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
			Reference Material
EC50	Effective Concentration, 50 %	RM	11010101100 1/14001141
EINECS	European Inventory of Existing Commercial	RQ	Reportable Quantity
	Chemical Substances		
EPCRA	Emergency Planning and Community Right-to-Know	RTECS	Registry of Toxic Effects of Chemical Substances
	Act		
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transport Association	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPO	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	
			Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

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