

**Safety Data Sheet**

Prepared to US OSHA HazCom 2012, CMA, ANSI, European Directives and the UN Globally Harmonized System, 3<sup>rd</sup> Edition

**1. Chemical Product Identification**

**GHS Product Identifier:** 113.14 Sodium Iodide  
**Manufacturer/Supplier:** Deepwater Chemicals, Inc. 1210 Airpark Road, Woodward, Oklahoma 73801; Tel: 800-854-4064, Website: [www.deepwaterchemicals.com](http://www.deepwaterchemicals.com)

**Recommended Use:** Sodium Iodide is an inorganic halogenated salt that is highly soluble and used in the textile industry as a heat dispersent, a corrosion inhibitor in oilfield gas production, a chemical processing aid in the medical device industry and in the weather modification industry.

**(24) Hour Emergency Contact:** Chemtrec 800-424-9300  
**Technical Service:** 580-334-3539



**2. Hazard Identification**

Signal Word: Warning! Skin corrosion/irritation, Category 2, Causes skin irritation. Serious eye damage/eye irritation, Category 2B. Causes eye irritation.

**3. Composition/Information on Ingredients**

Chemical Identity	Molecular Weight	Chemical Formula	CAS#	EINECS#	Percent%
Sodium Iodide	149.89	NaI	7681-82-5	231-679-3	98.0-100

#### 4. First Aid Measures and Acute Health Hazards

**Eye Contact:** Causes eye irritation. IF IN EYES:

Flush with copious amounts of water for 30 minutes, occasionally lifting the upper and lower lids. Get medical advice/attention.

**Skin Contact:** Avoid breathing dusts. Do not get into eyes, on skin or on clothing. Causes skin irritation. Causes burning on lesions or cuts if present on skin. IF ON SKIN:

Remove/Take off immediately, all contaminated clothing. Rinse skin with water/shower. Wash hands thoroughly after handling.

**Ingestion:** Ingestion may irritate the gastrointestinal tract. IF SWALLOWED:

Immediately call a POISON CENTER or doctor/physician.

**Inhalation:** Inhalation of dusts can irritate the respiratory tract. IF INHALED:

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen. Get medical advice/attention.

**Chronic Exposure/Target Organs:** Chronic exposure of iodides may produce "iodism", which maybe manifested by skin rash, running nose, headache and irritation of the mucous membranes. Weakness, anemia loss of weight and general depression may also occur.

**Aggravation of Pre-existing Conditions:** Trigger and/or worsen hyperthyroidism and hypothyroidism then cause temporary or even permanent thyroid conditions.

#### 5. Fire Fighting Measures

<b>Flash Point:</b> Not Applicable	<b>Method Used:</b> Setaflash Closed Cup	
<b>LEL %:</b> No Data Available	<b>Auto Ignition Temp:</b> NDA	
<b>UEL%:</b> No Data Available		

**Fire and Explosion Hazards :** Noncombustible. Fire may produce toxic or irritating gases or fumes of Iodine.

**Extinguishing Media:** Use dry chemical, CO<sub>2</sub> or water spray.

**Fire Fighting Instructions:**

**Small Fires:** Use dry chemical, CO<sub>2</sub> or water spray.

**Large Fires:** Use water spray, fog or regular foam. Move containers from area if you can without risk. Dike fire control water for later disposal. Do not scatter material. Wear full protective clothing and NIOSH approved SCBA apparatus with a full-face respirator.

See the Emergency Response section, Fire, from the Emergency Response Guidebook, ERG# 153 for additional information.

## 6. Accidental Release Measures

**Evacuation:** See the Table of Initial Isolation and Protective Action Distances from the Emergency Response Guidebook, ERG# 153.

**Containment:** Ventilate area of leak and spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate source of spill if possible. Contain and recover solid when possible. Collect in an appropriate container or absorb with an inert material, i.e, vermiculite, dry sand earth, and place in a chemical waste drum. Do not use combustible materials, such as sawdust. Do not flush to sewer!

**Reporting:** In the event of a Hazardous Materials Incident during transportation, the regulations in 49CFR 171.15 and 171.16 are to be followed. Under 40CFR 302.6 (CERCLA), Potassium Iodide does not have a RQ.

## 7. Handling and Storage

**Storage Conditions:** Store in UN-rated fiber or HDPE drum and an inner polyethylene liner. Store in a cool, dry, well-ventilated area away from incompatible substances, direct sunlight or elevated temperatures. Keep containers tightly closed using a tamper-evident seal. Protect against physical damage. Shower and dispose of outer clothing and change to clean garments at the end of the day. Wash hands before eating and do not eat, drink or smoke in workplace. Containers of this material may be hazardous when empty since they retain product residues.

## 8. Exposure Controls/Personal Protection

<u>Substance ( CAS#)</u>	<u>ACGIH- TLV</u>	<u>ACGIH- STEL</u>	<u>OSHA- PEL</u>	<u>OSHA- STEL</u>
Sodium Iodide (CAS# 7681-82-5)	Not Established	Not Established	Not Established	Not Established

**Engineering Controls/Ventilation:** Use appropriate and MACT engineering controls to reduce air contamination and dust to approved or permissible standards. Where such systems are not effective or not feasible, wear suitable personal protective equipment, which performs satisfactorily and meets local/national standards.

**Eye/Face Protection:** Avoid eye and skin contact with dusts. Eye contact can be avoided by wearing a full-face shield or safety glasses with side and brow protection. Refer to OSHA's 29 CFR 1910.133 Eye and Face Protection Standard for regulatory compliance.

**Skin Protection:** Proper protective gloves should be worn when handling hazardous materials. Glove selection guides should be consulted. Rubber, Nitrile, PVC coated, Neoprene, Vinyl or Butyl gloves offer proper protection. It is recommended to wear full skin protection. This can be achieved by wearing breathable chemical suits, Teflon impregnated, with hoods and elastic bands for the wrists and ankles.

**Respiratory Protection:** Always use a NIOSH approved, at minimum, P95 filtration efficiency respirator or, NIOSH P100 cartridge for a full-face respirator. Observe the manufacturer's cartridge service-life and the recommended change schedule. Refer to OSHA's 29 CFR 1910.134 Respiratory Protection Program for regulatory compliance is the use of these respirators.

## 9. Physical and Chemicals Properties

<b>Appearance:</b>	White crystalline solid, deliquescent
<b>Odor:</b>	Slight
<b>Physical State:</b>	Solid
<b>pH</b>	6-8 in a saturated solution
<b>Boiling Point:</b>	Not Applicable
<b>Melting Point:</b>	661 °C
<b>Freezing Point:</b>	Not Applicable
<b>Vapor Pressure:</b>	Not Applicable
<b>Vapor Density:</b>	Not Applicable
<b>Bulk Density</b>	3.67 g/cm <sup>3</sup>
<b>Evaporation Rate:</b>	Not Applicable
<b>Solubility in Water:</b>	184 g/100 mL (25 °C) : 302 g/100 mL (100°C)
<b>Percent Solids by Weight:</b>	100%
<b>Percent Volatile:</b>	No data
<b>Refractive Index</b>	1.774
<b>Volatile Organic Compounds</b>	None
<b>Molecular Weight</b>	149.89

Note: The physical data presented above are typical values and should not be construed as a specification.

## 10. Stability and Reactivity

**Stability:** Stable under ambient temperatures and pressure, but will yellow as a result of oxidation by the formation of free iodine. Sodium Iodide is highly hygroscopic.

**Incompatible Materials:** Violent reaction or ignition on contact with diazonium salts

**Hazardous Polymerization:** Will not occur.

## 11. Toxicological Information

Substance (CAS No.)	Sodium Iodide	7681-82-5
Acute Testing	Route of Entry	Value/Critical Effects
Eye Irritation	Eye-rbt	100 mg/24H Moderate eye irritation
Skin Irritation	Skn-rbt	500 mg/24H Moderate skin irritation

<b>Skin Sensitization</b>		Negative
<b>Dermal Toxicity</b>	None published	
<b>Oral Toxicity</b>	Orl-rat	4,340 mg/kg

**Subchronic Exposure:** This substance has not been fully investigated to provide any information.

**Chronic Exposure/Carcinogenicity:** This substance has not been fully investigated to provide any information.

**Teratology/Developmental Toxicity:** Human teratogenic effects by ingestion

**Reproductive Toxicity:** Experimental teratogenic and reproductive effects

**Mutagenicity/Genotoxicity:** This substance has not been fully investigated to provide any information.

**Neurotoxicity:** This substance has not been fully investigated to provide any information.

## 12. Ecological Information

**Terrestrial Fate:** This substance has not been fully investigated to provide any information.

**Aquatic Fate:** This substance has not been fully investigated to provide any information.

## 13. Disposal Considerations

Dispose of in a manner consistent with federal, state and local regulations. This material is not listed as an Underlying Hazardous Constituent (UHC). The Hazardous Waste Characteristic of Toxicity has not been performed on this compound using the TCLP Method 1311. Recover and Recycling of Iodides is standard practice in the manufacturing industry. Refer to your manufacturer/recycler for additional information.

## 14. Transport Information

<b>SHIPPING CRITERIA</b>	<b>US DOT</b>	<b>IATA</b>
Proper Shipping Name	Not Regulated	Not Regulated
Hazard Class		
Identification Number		
Packing Group		
Shipping Label		
Additional Marking Requirement		

## 15. Regulatory Information

### US Federal Regulations:

- OSHA:** This material is not considered a Highly Hazardous Chemical and has no established Permissible Exposure Limit (PEL).
- EPA:** Clean Air Act- This material is not listed as a Hazardous Air Pollutant (HAP). This material does not contain any Class1 or 2 Ozone Depletors.  
Clean Water Act- This material is not listed as a Hazardous Substance, Priority Pollutant or as a Toxic Pollutant.  
TSCA- CAS# 7681-82-5 is listed on the Public Inventory.  
SARA Title III-  
 Section 302: RQ= Not Applicable  
 Section 302: This product does not have a Threshold Planning Quantity (TPQ)  
 Section 313: This material subject to reporting under 40 CFR Part 372, Toxic Release Inventory.

**Individual Country Lists:** This material can be found on the following country listings; Australia (AICS), Canada (WHMIS), EU (REACH), Japan (ENCS), Korea (ECL), Philippines(PICCS), New Zealand (NZIoC), SWISS (Giffliste 1), Taiwan (BSMI).

### European Regulations

#### European Priority Lists Information (Council Regulation (EEC) 793/93):

This chemical substance is not listed in a priority list.

#### Classification and Labeling Information:

This chemical substance is not classified in the Annex I of Directive 67/548/EEC.

#### IUCLID & OECD Chemical Data Sheets and Export Files Information:

Not available for this substance

#### European Risk Assessment Information (Council Regulation (EEC) 793/93):

Not available for this substance

**EU: EINECS#: 231-679-3**

**State Regulations:** Each State and LEPC may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore the user should consult state and local authorities.

## 16. Other Information

**Users Responsibility:** A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions are required. Any health hazard and safety information herein should be passed on to your customers or employees.

**Disclaimer of Liability:** The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination

of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

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**SDS Code:** 113.14 GHS; 113.04; 113.15

**Effective** : 06/01/2015

**Supercedes:** 08/09/2000

For Technical or Regulatory Information contact:

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