



1210 Airpark Road
 Woodward, OK 73801
 1-800-854-4064 * (580) 256-0500
 Fax (580) 256-0575
 Website: www.deepwaterchemicals.com

Technical Data Sheet

SODIUM IODIDE

1. Chemical Product Identification

GHS Product Identifier: 113.04, Sodium Iodide Tech; 113.05, Sodium Iodide 57% Soln.; 113.14, Sodium Iodide USP; 113.15, Sodium Iodide High Purity; 113.25, Sodium Iodide Pure; 113.34, Sodium Iodide ACS.

Formula: NaI

CAS No.: 7681-82-5

Formula Description: Technical: White to light yellow crystalline powder. **USP/High Purity/Pure:** Colorless, odorless crystals or white crystalline powder. Deliquescent in moist air, and develops a brown tint upon decomposition. Very soluble in water, freely soluble in alcohol and acetone. **ACS:** White powder; odorless; slowly becomes brown in air; deliquescent; saline, somewhat bitter taste. Soluble in water alcohol, and acetone. **57% Solution:** Clear, colorless to light brown liquid.

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

General Properties:

Tech/USP/High Purity/Pure/ACS

Molecular Weight: 149.9

Density (25°C): 3.665

Solubility: 178 g/100 ml H₂O (20°C)

302 g/100 ml H₂O (100°C)



2. Chemical Product Specifications

Chemical Identity	Assay (as is)
Sodium Iodide Tech	98.0% minimum

Chemical Identity	Assay
Sodium Iodide 57%	55.0% - 59.0%

Chemical Identity	Identification	Alkalinity	Water
Sodium Iodide USP	Passes Test	USP Standards	2.0% maximum
	Iodate (IO₃)	Thiosulfate & Barium	Potassium (K)
	4 ppm maximum	USP Standards	USP Standards
	Heavy Metals	Nitrate, Nitrite, & Ammonia	Assay (Anhydrous)
	0.001% maximum	USP Standards	99.0 – 101.5%
Conforms to the current USP monograph.			

Chemical Identity	Assay (anhydrous)	Identification	Alkalinity
Sodium Iodide High Purity	99.5 – 100.5%	Passes Test	USP Standards
	Water	Iodate (IO₃)	Thiosulfate & Barium
	1.0% maximum	4 ppm maximum	USP Standards
	Potassium (K)	Heavy Metals (as Pb)	Nitrate, Nitrite, & Ammonia
	15 ppm maximum	0.001% maximum	USP Standards
	Chloride & Bromide (as Cl)	Insoluble Matter	Phosphate (PO₄)
	0.01% maximum	Report Results	0.001% maximum
	Sulfate (SO₄)	Barium (Ba)	pH of 5% Solution
	0.005% maximum	0.002% maximum	Report Results
	Trace Metal Analysis		
≤ 100.00 ppm			

Chemical Identity	Assay (anhydrous)	Identification	Alkalinity
Sodium Iodide Pure	99.0 – 101.5%	Passes Test	USP Standards
	Water	Iodate (IO₃)	Thiosulfate & Barium
	2.0% maximum	4 ppm maximum	USP Standards
	Potassium (K)	Heavy Metals (as Pb)	Nitrate, Nitrite, & Ammonia
	USP Standards	0.001% maximum	USP Standards
	Chloride & Bromide (as Cl)	Insoluble Matter	Iron (Fe)
	0.01% maximum	Report Results	3 ppm maximum
	Phosphate (PO₄)	Sulfate (SO₄)	Barium (Ba)
	0.001% maximum	0.005% maximum	0.002% maximum
	pH of 5% Solution		
Report Results			

Chemical Identity	Assay	pH of 5% Solution	Insoluble Matter
Sodium Iodide ACS	99.5% minimum	6.0 – 9.0 (25°C)	0.01% maximum
	Chloride & Bromide (as Cl)	Iodate (IO₃)	Nitrogen Compounds (as N)
	0.01% maximum	3 ppm maximum	0.002% maximum
	Phosphate (PO₄)	Sulfate (SO₄)	Barium (Ba)
	0.001% maximum	0.005% maximum	0.002% maximum
	Heavy Metals (as Pb)	Iron (Fe)	Calcium (Ca)
	5 ppm maximum	5 ppm maximum	0.002% maximum
	Magnesium (Mg)	Potassium (K)	
0.001% maximum	0.01% maximum	Conforms to ACS 9 th Edition	

3. Standard Packaging

Net Weight	Packaging	Product
25 lbs.	LDPE 2 gal Pail	Tech/USP/Reagent/ACS
25 lbs.	LDPE 2 gal Pail	High Purity/Pure
400 lbs.	UN1H1 30 gal Polydrum	Sodium Iodide 57% Soln
750 lbs.	UN1H1 50 gal Polydrum	Sodium Iodide 57% Soln
Dry material packaged with polyethylene liner. All drums suitable for export.		

4. Transport Information

SHIPPING CRITERIA	US DOT	IATA and IMDG
Proper Shipping Name	Not Regulated	Not Regulated
Hazard Class		
Identification Number		
Packing Group		
Shipping Label		
Additional Marking Requirement		

5. 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.

SDS with detailed information available upon request.