



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

Technical Data Sheet

HYDRIODIC ACID

1. Chemical Product Identification

GHS Product Identifier: 132.14, Hydriodic Acid 47%; 132.24, Hydriodic Acid 47% ACS; 132.34, Hydriodic Acid 57%; 132.54, Hydriodic Acid 55% ACS

Formula: HI

CAS No.: 10034-85-2

Formula Description: Unstabilized: Colorless to dark red aqueous liquid.
Stabilized: Colorless to pale yellow aqueous liquid.

Recommended Use: Hydriodic Acid is used in inorganic and organic synthesis and as a reducing agent. Used as a catalyst in Acetic Acid manufacturing. Used as a disinfectant in teat dips for Mastitis prevention in dairy cattle. Not permitted in the manufacturing of clandestine chemicals.

General Properties:

HI47%

Molecular Weight: 127.9

Specific Gravity (20°C): 1.5 (12.5 lbs/gal)

HI55% & HI57%

Molecular Weight: 127.9

Specific Gravity (20°C): 1.7 (14.2 lbs/gal)

Boiling Temperature for Azeotrope: 127°C (57% H, 43% H₂O)



2. Chemical Product Specifications

Chemical Identity	Assay	
Hydriodic Acid 47%	47.0% minimum	Material is available with or without the addition of 0.75% (wt) H ₃ PO ₂ stabilizer.

Chemical Identity	Assay (HI)	Chloride & Bromide (as Cl)	Sulfate (SO ₄)
Hydriodic Acid 47% ACS	47.0% HI minimum	0.05% maximum	0.005% maximum
	Stabilizer (H₃PO₂)	Heavy Metals (as Pb)	Iron (Fe)
	1.5% maximum	0.001% maximum	0.001% maximum
	Conforms to current ACS Edition		

Chemical Identity	Assay	Free Iodine	Residue After Ignition	Chloride & Bromide (as Cl)
Hydriodic Acid 55% ACS	55.0 – 58.0%	0.75% maximum	0.01% maximum	0.05% maximum
	Phosphate (PO₄)	Sulfate (SO₄)	Heavy Metals (as Pb)	Iron (Fe)
	0.001% max	0.005% max	0.001% max	0.001% max
	Conforms to current ACS Edition			

Chemical Identity	Assay	
Hydriodic Acid 57%	55.0 % minimum	Material is available with or without the addition of 0.75% (wt) H ₃ PO ₂ stabilizer.

3. Standard Packaging

Net Weight	Packaging	Product
60 lbs.	UN3H1 Jerrican	Hydriodic Acid 47%/ACS
70 lbs.	UN3H1 Jerrican	Hydriodic Acid 55% & 57%
350 lbs.	UN1H1 HDPE Drum	Hydriodic Acid 47%/ACS
400 lbs.	UN1H1 HDPE Drum	Hydriodic Acid 55% & 57%
250 kgs.	UN6 HA1 55 Gal Composite Drum	Hydriodic Acid 55% & 57%

4. Transport Information

SHIPPING CRITERIA	US DOT	IATA and IMDG
Proper Shipping Name	Hydriodic Acid Solution	Hydriodic Acid Solution
Hazard Class	Class 8	Class 8
Identification Number	UN 1787	UN 1787
Packing Group	PG II	PG II
Shipping Label	Corrosive	Corrosive
Additional Marking Requirement	Consult the 49 CFR §172 for special provisions and markings	Consult the current DGR Regulations , Section 7

5. Handling and Storage

Storage Conditions: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed and away from sources of heat or ignition. Hydriodic Acid is a List I chemical regulated by the Department of Justice, Drug Enforcement Administration. Keep material and containers under secure conditions to prevent diversion. Containers of this material may be hazardous when empty since they contain product residue.

SDS with detailed information available upon request.

6. Regulatory Information

The purchasing and exportation of List 1 Chemicals and Hydriodic Acid Solutions requires the submission of documents for the verification to the validity of the sale and the intended end-use. The regulation can be found in 21 CFR, Food and Drugs, parts 1300-1313 under the jurisdiction of U.S. DOJ, Drug Enforcement Administration.