

Technical Data Sheet

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IODINE

1. Chemical Product Identification

GHS Product Identifier: 100.04, Iodine, Crude; 100.15, Iodine, USP; 100.24. Iodine, ACS; 100.34, Iodine,

HP

Formula: I2

CAS No.: 7553-56-2

Formula Description: Heavy, purplish-black flakes or prills with metallic luster.

Recommended Use: Elemental Iodine is used for the manufacturing of inorganic and organic derivatives; used as a disinfectant and anti-bacterial agent in solutions, tinctures and salves; used in x-ray contrast media. Not permitted in the manufacturing of clandestine chemicals.

General Properties:

Molecular Weight: 253.8 Density (25°C): 4.93 Melting Point: 113.5°C Boiling Point: 184.4°







2. Chemical Product Specifications

| Chemical Identity | Assay Nonvolatile Residue | | Chloride & Bromide | |
|-------------------|---------------------------|---------------|--------------------|--|
| Iodine Crude | 99.5% minimum | 0.05% maximum | 0.05% maximum | |

| Chemical Identity | Assay | Nonvolatile Residue | Chloride & Bromide |
|-------------------|------------------|---------------------|---------------------------------------|
| | 99.8% - 100.5% | 0.05% maximum | 0.028% maximum |
| Iodine USP | Identification A | Identification B | |
| | Passes Test | Passes Test | Conforms to the current USP monograph |

| Chemical Identity | Assay | Nonvolatile Residue | Chloride & Bromide (as cl) | |
|-------------------|------------------|---------------------|-------------------------------|---------------------------------|
| Iodine ACS | 99.8% minimum | 0.01% maximum | 0.005% maximum | Conforms to current ACS Edition |

| Chemical Identity | Purity (by difference) | Nonvolatile Residue | Chloride & Bromide (as cl) |
|--------------------|------------------------|---------------------|----------------------------|
| Iodine High Purity | 99.99% minimum | 0.005% maximum | 0.005% maximum |

3. Standard Packaging

| Net Weight | Packaging | |
|---|-----------------------------|--|
| 12.5 lbs. | 1.0 gal 1H2/X12/S NL/Curtec | |
| 25 kgs. | 4.0 gal 1H2/X30/S PP | |
| 50 kgs. | 8.5 gal 1G/Y55/S Fiberboard | |
| Material packaged with Saran inner liner and polyethylene outer liner; suitable | | |

for export. Curtec drum does not include liner.

4. Transport Information

| SHIPPING CRITERIA | US DOT | IATA and IMDG |
|-----------------------|-------------------------------------|--------------------------------------|
| Proper Shipping Name | Iodine | Iodine |
| Hazard Class | Class 8, 6.1 | Class 8, 6.1 |
| Identification Number | UN 3495 | UN 3495 |
| Packing Group | PG III | PG III |
| Shipping Label | Corrosive, Toxic | Corrosive, Toxic |
| Additional Marking | Consult the 49 CFR §172 for special | Consult the current DGR Regulations, |
| Requirement | provisions and markings | 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. It is recommended to use a double-liner system using a PTFE and PE liner. 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 Iodine 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.