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| **TECHNICAL DATA SHEET** | **IODINE** |

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| https://upload.wikimedia.org/wikipedia/commons/thumb/0/0c/Iodine-unit-cell-3D-balls-B.png/150px-Iodine-unit-cell-3D-balls-B.png |  | Product Name | : | IODINE |
| Brand Name | : | IO |
| Synonym | : | Iodine |
| CAS NO. | : | 7553-56-2 |
| Molecular Formula | : | I2 |
| **Description :**  **Iodine** is a [chemical element](https://en.wikipedia.org/wiki/Chemical_element) with symbol **I** and [atomic number](https://en.wikipedia.org/wiki/Atomic_number) 53. The heaviest of the stable [halogens](https://en.wikipedia.org/wiki/Halogen), it exists as a lustrous, purple-black metallic solid at [standard conditions](https://en.wikipedia.org/wiki/Standard_condition) that sublimes readily to form a violet gas.  Iodine occurs in many oxidation states, nincluding [iodide](https://en.wikipedia.org/wiki/Iodide) (I−), [iodate](https://en.wikipedia.org/wiki/Iodate) (IO−3), and the various [periodate](https://en.wikipedia.org/wiki/Periodate) anions. It is the least abundant of the stable halogens, being the sixty-first most abundant element. It is even less abundant than the so-called [rare earths](https://en.wikipedia.org/wiki/Rare_earth_elements). It is the heaviest [essential element](https://en.wikipedia.org/wiki/Essential_element). Iodine is found in the [thyroid hormones](https://en.wikipedia.org/wiki/Thyroid_hormone). [Iodine deficiency](https://en.wikipedia.org/wiki/Iodine_deficiency) affects about two billion people and is the leading preventable cause of[intellectual disabilities](https://en.wikipedia.org/wiki/Intellectual_disabilities).This Iodine meets all specifications for Iodine to receive the IP/AR/PURE. | Molecular Weight | : | 253.81g/mol |
|  | Description | : | Violet greyish prills or crystals , metallic luster , pungent odour. |
| Solubility | : | Very slightly soluble in water, very soluble in concentrated solutions of iodides, soluble in ethanol (96 %), slightly soluble in glycerol. |
| Non Volatile matter | : | 0.01% |
| Chloride | : | Max. 0.003 % |
| Heavy Metals | : | Max. 10 ppm |
| Assay | : | Not less than 99.0 % & Not more than 100.5 % |
| HS Code | : | 28012000 |
| **Applications:**   * Iodine used in analysis & synthesis of chemicals. * It is also used in medicine. * In medicine, a saturated solution of [potassium iodide](https://en.wikipedia.org/wiki/Potassium_iodide) is used to treat acute [thyrotoxicosis](https://en.wikipedia.org/wiki/Thyrotoxicosis). It is also used to block uptake of [iodine-131](https://en.wikipedia.org/wiki/Iodine-131) in the thyroid gland (see isotopes section above), when this isotope is used as part of radiopharmaceuticals (such as [iobenguane](https://en.wikipedia.org/wiki/Iobenguane)) that are not targeted to the thyroid or thyroid-type tissues. * Elemental iodine is used as a disinfectant either as the element, or as the water-soluble [triiodide](https://en.wikipedia.org/wiki/Triiodide) anion I3− generated *in situ* by adding [iodide](https://en.wikipedia.org/wiki/Iodide) to poorly water-soluble elemental iodine (the reverse chemical reaction makes some free elemental iodine available for antisepsis). Elemental iodine may also be used to treat [iodine deficiency](https://en.wikipedia.org/wiki/Iodine_deficiency). * It is used in deficiency of Iodine. | | | | |
| **Packing:** Net weight: 25 Kg with a tolerance of ± 0,02 Kg.  Inside packing: double plastic black bag  Outside packing: FIBER/HDPE box. | | | | |
| **Storage :** Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F). | | | | |
| **Transportation:** Classified in corrosive material. | | | | |
| While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. This information is based on our present state of knowledge and is intended to provide general notes on our products and their  uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our General Conditions of Sale. | | | | |

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