



IODINE – Physical & Chemical Properties

CASR No.	[7553 – 56 - 2]
EC-No.	231-442-4
HS-No.	2801 20 00
RTECS	NN1575000
Poison class	(CH) 2
Max. Allowable Concentration (MAK), Air	1.1 mg / m ³
LD 50 oral rat	14 mg / kg
Packing category	G
Road / Rail	6.1 / 67 b
IMDG-Code	61 / II UN 3290
IATA / DGR	6.1 8 II UN 3290 CAO 615 PAX 613
Merck-Index	10, 4881
Mol. Formula	I ₂
Mol. Weight	253.81
Specific Density, 20 °C	4.93 g / cm ³
Bulk Density	~ 2100 kg / m ³
Melting Range	114 °C
Boiling Point	185 °C
Vapour Pressure, 25 °C	0.41 hPa
Solubility in H ₂ O, 20 °C	29 mg per 100 ml
pH value (saturated solution, H ₂ O, 20 °C)	~ 5.4
Atmospheric Susceptibility	slow sublimation

Relevant Risk, Safety & Disposal Aspects

Risk	R 20/21-50	Harmful by inhalation and in contact with skin. Very toxic to aquatic organisms.
Safety	S 23.2-25-61	Do not breathe vapours, Avoid contact with eyes, Avoid release to the environment.
Disposal	D 22	Make harmless by neutralizing with acidic Sodium thiosulphate solution.

Application, Storage & Packing

Application	In Organic & Inorganic chemical preparations.
Storage	Store in a well closed tight container away from moisture.
Packing	In 25 kg with double polythene bags inside HDPE Drum.



IODINE – LR

Description	Violet lustrous flakes, prilles or granules
Assay (iodometric)	99.5 – 100.5 %
Identification	passes test

Maximum Limits of Impurities

Non-volatile matter	0.05 %
Bromide and chloride (as Cl)	0.025 %