SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of the substance Iodine

Identification number 053-001-00-3 (Index number)

Registration number -

Document number 2IM

Synonyms None.

Materion Code 2IM

Issue date 15-August-2018

Revision date 12-June-2020

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Materion Advanced Chemicals Inc.

Address 407 N. 13th Street
1316 W. St. Paul Avenue
Milwaukee, WI 53233
United States

Division Milwaukee

Telephone 414.212.0257

e-mail advancedmaterials@materion.com

Contact person Laura Hamilton

1.4. Emergency telephone number

Supersedes date 15-August-2018

Version number 02

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Not available.

Uses advised against None known.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classificatior applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards		
Acute toxicity, dermal	Category 4	H312 - Harmful in contact with skin.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Environmental hazards		
Hazardous to the aquatic environment, acute aquatic hazard	Category 1	H400 - Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term aquatic hazard	Category 1 M-factor = 10.	H410 - Very toxic to aquatic life with long lasting effects.

Hazard summary Harmful if inhaled. Harmful in contact with skin. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects. The material as sold in solid form is generally not considered hazardous. However, if the process involves grinding, melting, cutting or any other process that causes a release of dust or fumes, hazardous levels of airborne particulate could be generated.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Iodine

Hazard pictograms

Signal word Warning

Hazard statements

H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P261	Avoid breathing dust.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing.

Response

P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

Storage Store away from incompatible materials.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information For further information, please contact the Product Stewardship Department at +1.800.862.4118.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.1. Substances

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Iodine	≤ 100	7553-56-2 231-442-4	-	053-001-00-3	
Classification:	Acute Tox. 4;H312, Acute Tox. 4;H332, Aquatic Acute 1;H400, Aquatic Chronic 1;H410(M=10)				

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a poison centre or doctor/physician if you feel unwell.

Skin contact Wash off with soap and water. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.

Eye contact Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed	Headache.
4.3. Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards	No unusual fire or explosion hazards noted.
5.1. Extinguishing media	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Special firefighting procedures	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Prevent product from entering drains. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Minimise dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Material	Type	Value
Iodine	Ceiling	1 mg/m3
		0,1 ppm
	MAK	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	Ceiling	1 mg/m3
		0,1 ppm
	MAK	1 mg/m3
		0,1 ppm

Belgium. Exposure Limit Values.

Material	Type	Value	Form
Iodine	STEL	1 mg/m3	Vapour.
		0,1 ppm	Vapour.
	TWA	0,1 mg/m3	Vapour and aerosol.
		0,01 ppm	Vapour and aerosol.

Components	Type	Value	Form
Iodine (CAS 7553-56-2)	STEL	1 mg/m3	Vapour.
		0,1 ppm	Vapour.
	TWA	0,1 mg/m3	Vapour and aerosol.
		0,01 ppm	Vapour and aerosol.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Material	Type	Value
Iodine	TWA	3 mg/m3

Components	Type	Value
Iodine (CAS 7553-56-2)	TWA	3 mg/m3

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Material	Type	Value
Iodine	STEL	1,1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1,1 mg/m3
		0,1 ppm

Czech Republic. OELs. Government Decree 361

Material	Type	Value
Iodine	Ceiling	1 mg/m3
	TWA	0,1 mg/m3

Components	Type	Value
Iodine (CAS 7553-56-2)	Ceiling	1 mg/m3
	TWA	0,1 mg/m3

Denmark. Exposure Limit Values

Material	Type	Value
Iodine	Ceiling	1 mg/m3
		0,1 ppm

Denmark. Exposure Limit Values

Components	Type	Value
Iodine (CAS 7553-56-2)	Ceiling	1 mg/m3
		0,1 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Material	Type	Value
Iodine	Ceiling	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	Ceiling	1 mg/m3
		0,1 ppm

Finland. Workplace Exposure Limits

Material	Type	Value
Iodine	STEL	1,1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1,1 mg/m3
		0,1 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Material	Type	Value
Iodine	VLE	1 mg/m3
Regulatory status: Indicative limit (VL)		
		0,1 ppm
Regulatory status: Indicative limit (VL)		

Components	Type	Value
Iodine (CAS 7553-56-2)	VLE	1 mg/m3
Regulatory status: Indicative limit (VL)		
		0,1 ppm
Regulatory status: Indicative limit (VL)		

Greece. OELs (Decree No. 90/1999, as amended)

Material	Type	Value
Iodine	STEL	1 mg/m3
		0,1 ppm
	TWA	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1 mg/m3
		0,1 ppm
	TWA	1 mg/m3
		0,1 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Material	Type	Value
Iodine	STEL	1 mg/m3
	TWA	1 mg/m3

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1 mg/m3
	TWA	1 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Material	Type	Value
Iodine	STEL	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1 mg/m3
		0,1 ppm

Ireland. Occupational Exposure Limits

Material	Type	Value
Iodine	STEL	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1 mg/m3
		0,1 ppm

Italy. Occupational Exposure Limits

Material	Type	Value	Form
Iodine	STEL	0,1 ppm	Vapor fraction
	TWA	0,01 ppm	Inhalable fraction and vapor.

Components	Type	Value	Form
Iodine (CAS 7553-56-2)	STEL	0,1 ppm	Vapor fraction
	TWA	0,01 ppm	Inhalable fraction and vapor.

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Material	Type	Value
Iodine	TWA	1 mg/m3

Components	Type	Value
Iodine (CAS 7553-56-2)	TWA	1 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Material	Type	Value
Iodine	Ceiling	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	Ceiling	1 mg/m3
		0,1 ppm

Norway. Administrative Norms for Contaminants in the Workplace

Material	Type	Value
Iodine	Ceiling	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	Ceiling	1 mg/m3
		0,1 ppm

Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Material	Type	Value
Iodine	STEL	1 mg/m3
	TWA	0,5 mg/m3

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1 mg/m3
	TWA	0,5 mg/m3

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Material	Type	Value	Form
Iodine	TWA	0,1 ppm	Vapour and aerosol.
		0,01 ppm	Inhalable fraction and vapor.

Components	Type	Value	Form
Iodine (CAS 7553-56-2)	TWA	0,1 ppm	Vapour and aerosol.
		0,01 ppm	Inhalable fraction and vapor.

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Material	Type	Value
Iodine	STEL	1 mg/m3
		0,2 ppm
	TWA	0,5 mg/m3
		0,09 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1 mg/m3
		0,2 ppm
	TWA	0,5 mg/m3
		0,09 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Material	Type	Value
Iodine	STEL	1,1 mg/m3
		0,1 ppm
	TWA	1,1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1,1 mg/m3
		0,1 ppm
	TWA	1,1 mg/m3
		0,1 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Material	Type	Value
Iodine	TWA	1,1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	TWA	1,1 mg/m3
		0,1 ppm

Spain. Occupational Exposure Limits

Material	Type	Value
Iodine	STEL	1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1 mg/m3
		0,1 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Material	Type	Value
Iodine	Ceiling	1 mg/m3
		0,1 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
Iodine (CAS 7553-56-2)	Ceiling	1 mg/m3
		0,1 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Material	Type	Value	Form
Iodine	STEL	1 mg/m3	Vapour and aerosol.
		0,1 ppm	Vapour and aerosol.
	TWA	1 mg/m3	Vapour and aerosol.
		0,1 ppm	Vapour and aerosol.

Components	Type	Value	Form
Iodine (CAS 7553-56-2)	STEL	1 mg/m3	Vapour and aerosol.
		0,1 ppm	Vapour and aerosol.
	TWA	1 mg/m3	Vapour and aerosol.
		0,1 ppm	Vapour and aerosol.

UK. EH40 Workplace Exposure Limits (WELs)

Material	Type	Value
Iodine	STEL	1,1 mg/m3
		0,1 ppm

Components	Type	Value
Iodine (CAS 7553-56-2)	STEL	1,1 mg/m3
		0,1 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Iodine (CAS 7553-56-2) Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection Wear appropriate chemical resistant gloves.

- Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapour cartridge.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	113,7 °C (236,66 °F)
Initial boiling point and boiling range	184,4 °C (363,92 °F)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	0,03 kPa (25 °C (77 °F))
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	0,1 g/l
Partition coefficient (n-octanol/water)	2,49
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Density	4,93 g/cm3 estimated at 25 °C
Dynamic viscosity	2,27 mPa.s (116 °C (240,8 °F))
Kinematic viscosity	0,4605 mm²/s estimated
Molecular formula	I2
Molecular weight	253,81 g/mol
Specific gravity	4,93 at 25 °C

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
10.5. Incompatible materials	Ammonia.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation Harmful if inhaled.

Skin contact Harmful in contact with skin.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms Headache.

11.1. Information on toxicological effects

Acute toxicity In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if inhaled. Harmful in contact with skin.

Product	Species	Test Results
Iodine		
Acute		
Oral		
LD50	Rat	14 g/kg

Components	Species	Test Results
Iodine (CAS 7553-56-2)		
Acute		
Oral		
LD50	Rat	14 g/kg

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation Due to partial or complete lack of data the classification is not possible.

Respiratory sensitisation Due to partial or complete lack of data the classification is not possible.

Skin sensitisation Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Carcinogenicity Due to partial or complete lack of data the classification is not possible.

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

Reproductive toxicity Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance information No information available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity Very toxic to aquatic life with long lasting effects.

Product		Species	Test Results
Iodine			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	> 0,01 mg/l, 96 hours

Components		Species	Test Results
Iodine (CAS 7553-56-2)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	> 0,01 mg/l, 96 hours

12.2. Persistence and degradability No data is available on the degradability of this substance.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Iodine	2,49
Iodine	2,49

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

12.7. Additional information

Estonia Dangerous substances in groundwater Data

Iodine (CAS 7553-56-2)	Pesticides (total) 0,5 ug/l
	Pesticides (total) 5 ug/l

Estonia Dangerous substances in soil Data

Iodine (CAS 7553-56-2)	Synthetic pesticides (total of active substances) 0,5 mg/kg
	Synthetic pesticides (total of active substances) 20 mg/kg
	Synthetic pesticides (total of active substances) 5 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Special precautions Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. UN number UN3495

14.2. UN proper shipping name Iodine

14.3. Transport hazard class(es)

Class 8

Subsidiary risk 6.1(PGIII)

Label(s) 8+6.1

14.4. Packing group III

14.5. Environmental hazards No.

14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number UN3495

14.2. UN proper shipping name Iodine

14.3. Transport hazard class(es)

Class	8
Subsidiary risk	6.1(PGIII)
14.4. Packing group	III
14.5. Environmental hazards	No.
ERG Code	8P
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

14.1. UN number	UN3495
14.2. UN proper shipping name	IODINE
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGIII)
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN; IATA; IMDG

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Iodine (CAS 7553-56-2)

Other regulations	The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
National regulations	Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
Training information	Follow training instructions when handling this material.
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