



## SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 01/19/2018

Revision Date 01/19/2018

### 1 Identification of the Substance/Mixture and Company

**Product Name:** Iodine, Crystal, Sublimed, Reagent

**SDS Code:** SSAHIOD

**CAS Number:**

7553-56-2

**EC number:**

231-442-4

**Index number:**

053-001-00-3

**Product Description:** Laboratory Reagent

**Manufacturer/Supplier:**

American MasterTech

1330 Thurman Street

Lodi, CA 95240

USA

(800) 860-4073

**European Authorized Representative:**

Emergo Europe

Prinsessegracht 20

2514 AP The Hague,

The Netherlands

**Emergency Telephone Number:** Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

### 2 Hazards Identification

**Classification of the substance or mixture**



GHS09 Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

**Label elements**

**GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**



GHS07



GHS09

**Signal word** Warning

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**Hazard-determining components of labeling:**

iodine

**Hazard statements**

Harmful in contact with skin or if inhaled.

Very toxic to aquatic life.

**Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves / protective clothing.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

Collect spillage.

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

**Classification system:****NFPA ratings (scale 0 - 4)**

Health = 3

Fire = 0

Reactivity = 0

**HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 0

Reactivity = 0

**Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

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### 3 Composition

**Chemical characterization: Substances****CAS No. Description**

7553-56-2 iodine

**Identification number(s)****EC number:** 231-442-4**Index number:** 053-001-00-3

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### 4 First Aid Measures

**Description of first aid measures****General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

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**After skin contact:** Immediately rinse with water.**After eye contact:** Rinse opened eye for several minutes under running water.**After swallowing:** If symptoms persist consult doctor.**Information for doctor:****Most important symptoms and effects, both acute and delayed:** No further relevant information available.**Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

### 5 Firefighting Measures

**Extinguishing media****Suitable extinguishing agents:** Use fire fighting measures that suit the environment.**Special hazards arising from the substance or mixture:** No further relevant information available.**Advice for firefighters****Protective equipment:** Mouth respiratory protective device.

### 6 Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Not required.**Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**Protective Action Criteria for Chemicals****PAC-1:**

0.1 ppm

**PAC-2:**

0.5 ppm

**PAC-3:**

5 ppm

### 7 Handling and Storage

**Handling:****Precautions for safe handling:**

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

**Information about protection against explosions and fires:** No special measures required.**Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.

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**Information about storage in one common storage facility:** Not required.  
**Further information about storage conditions:** Keep receptacle tightly sealed.  
**Specific end use(s):** No further relevant information available.

## 8 Exposure Controls/Personal Protection

**Additional information about design of technical systems:** No further data; see item 7.

**Control parameters**

**Components with limit values that require monitoring at the workplace:**

**7553-56-2 iodine**

PEL	Ceiling limit value: 1 mg/m <sup>3</sup> , 0.1 ppm
REL	Ceiling limit value: 1 mg/m <sup>3</sup> , 0.1 ppm
TLV	Short-term value: 1 mg/m <sup>3</sup> , 0.1** ppm Long-term value: 0.1* mg/m <sup>3</sup> , 0.01* ppm *as inhalable fraction and vapor;**vapor

**Additional information:** The lists that were valid during the creation were used as basis.

**Exposure controls:**

**Personal protective equipment:**

**General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

**Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Not required.

## 9 Physical and Chemical Properties

**Information on basic physical and chemical properties**

**General Information**

**Appearance**

**Form:** Flakes

**Color:** Black

**Odor:** Iodine

**Odor threshold:** Not determined.

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<b>pH-value:</b>	Not applicable.
<b>Change in condition</b>	
<b>Melting point/Melting range:</b>	113.6 °C (236.5 °F)
<b>Boiling point/Boiling range:</b>	184.35 °C (363.8 °F)
<b>Flash point:</b>	Not applicable.
<b>Flammability (solid, gaseous):</b>	Product is not flammable.
<b>Decomposition temperature:</b>	Not determined.
<b>Auto igniting:</b>	Not determined.
<b>Danger of explosion:</b>	Product does not present an explosion hazard.
<b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Vapor pressure at 20 °C (68 °F):</b>	0.35 hPa (0.3 mm Hg)
<b>Density at 20 °C (68 °F):</b>	4.93 g/cm <sup>3</sup> (41.14085 lbs/gal)
<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not applicable.
<b>Evaporation rate:</b>	Not applicable.
<b>Solubility in / Miscibility with</b>	
<b>Water at 20 °C (68 °F):</b>	0.34 g/l
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>Other information:</b>	No further relevant information available.

## 10 Stability and Reactivity

**Reactivity:** No further relevant information available.

**Chemical stability:**
**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known.

**Conditions to avoid:** No further relevant information available.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicology Information

**Information on toxicological effects**
**Acute toxicity:**
**LD/LC50 values that are relevant for classification:**
**7553-56-2 iodine**

Oral LD50 14,000 mg/kg (rat)

**Primary irritant effect:**
**On the skin:** No irritant effect.

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**On the eye:** No irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological information:****Carcinogenic categories****IARC (International Agency for Research on Cancer)**

Substance is not listed.

**NTP (National Toxicology Program)**

Substance is not listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

## 12 Ecological Information

**Toxicity:****Aquatic toxicity:** No further relevant information available.**Persistence and degradability:** No further relevant information available.**Behavior in environmental systems:****Bioaccumulative potential:** No further relevant information available.**Mobility in soil:** No further relevant information available.**Ecotoxical effects:****Remark:** Very toxic for fish**Additional ecological information:****General notes:**

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Very toxic for aquatic organisms

**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

**Uncleaned packagings:****Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport Information

**UN-Number****DOT, ADR, ADN, IMDG, IATA**

Not applicable

**UN proper shipping name****DOT, ADR, ADN, IMDG, IATA**

Not applicable

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<b>Transport hazard class(es)</b>	
<b>DOT, ADR, ADN, IMDG, IATA Class</b>	Not applicable
<b>Packing group</b>	
<b>DOT, ADR, IMDG, IATA</b>	Not applicable
<b>Environmental hazards</b>	
<b>Marine pollutant:</b>	No
<b>Special precautions for user:</b>	Not applicable.
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>	Not applicable.
<b>UN "Model Regulation":</b>	Not applicable

## 15 Regulatory Information

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

**Section 355 (extremely hazardous substances):**

Substance is not listed.

**Section 313 (Specific toxic chemical listings):**

Substance is not listed.

**TSCA (Toxic Substances Control Act):**

Substance is listed.

**Proposition 65**
**Chemicals known to cause cancer:**

Substance is not listed.

**Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

**Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

**Chemicals known to cause developmental toxicity:**

Substance is not listed.

**Carcinogenic categories**
**EPA (Environmental Protection Agency)**

Substance is not listed.

**TLV (Threshold Limit Value established by ACGIH)**

A4

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

**GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

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**Hazard pictograms**

GHS07   GHS09

**Signal word** Warning**Hazard-determining components of labeling:**

iodine

**Hazard statements**

Harmful in contact with skin or if inhaled.

Very toxic to aquatic life.

**Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Wear protective gloves / protective clothing.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

Collect spillage.

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

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

**Department issuing SDS:** Regulatory Department**Contact:** Phone (800) 860-4073**Date of preparation / last revision** 01/19/2018 / -**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic



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vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety &amp; Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

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