

# SAFETY DATA SHEET

according to the OSHA  
Hazard Communication Standard

Version 8.14  
Revision Date 08/03/2026  
Print Date 08/04/2026

## SECTION 1. IDENTIFICATION

### 1.1 Product identifiers

Product name : Oxidizing Reagent 0.05 M Iodine <br/>in  
Pyridine/Water <br/>90/10 (v/v) For DNA  
Synthesis Novabiochem®

Product Number : BI0424  
Brand : Millipore

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

Identified uses : Reagent for analysis  
Restrictions on use : Not Available

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.  
SPRUCE ST 3050  
63103 St. Louis

Telephone : (314) 771-5765  
Telefax: (800) 325-5052

### 1.4 Emergency telephone number

Emergency Phone # : 800 424 9300 (CHEMTREC) 24/7  
+1 703 527 3887 (CHEMTREC) 24/7

---

## SECTION 2. HAZARDS IDENTIFICATION

### GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### Hazards for the product as supplied

Flammable liquids : Category 2

Acute toxicity (Oral) : Category 4

Millipore - BI0424

Page 1 of 18

|                                                           |                        |
|-----------------------------------------------------------|------------------------|
| Acute toxicity (Inhalation)                               | : Category 4           |
| Acute toxicity (Dermal)                                   | : Category 4           |
| Skin irritation                                           | : Category 2           |
| Eye irritation                                            | : Category 2A          |
| Specific target organ toxicity - repeated exposure (Oral) | : Category 1 (Thyroid) |
| Short-term (acute) aquatic hazard                         | : Category 3           |

#### Other hazards

None known.

#### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.  
H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H372 Causes damage to organs (Thyroid) through prolonged or repeated exposure if swallowed.  
H402 Harmful to aquatic life.

Precautionary statements : **Prevention:**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P240 Ground and bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.  
P242 Use non-sparking tools.  
P243 Take action to prevent static discharges.  
P260 Do not breathe mist or vapours.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.

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

**Response:**

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P314 Get medical advice/ attention if you feel unwell.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

P403 + P235 Store in a well-ventilated place. Keep cool.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

---

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture  
CAS-No. : Not Assigned

**Components**

| Chemical name | CAS No./Unique ID | Concentration (% w/w) | Trade secret |
|---------------|-------------------|-----------------------|--------------|
| Pyridine      | 110-86-1*         | $\geq 80 - \leq 100$  | TSC          |
| Iodine        | 7553-56-2*        | $\geq 0.1 - \leq 1$   | TSC          |

\* Indicates that the identifier is a CAS No.

TSC- the actual concentration or concentration range is withheld as a trade secret

---

## SECTION 4. FIRST AID MEASURES

|                                                             |                                                                                                                                                          |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| General advice                                              | : Show this safety data sheet to the doctor in attendance.                                                                                               |
| If inhaled                                                  | : After inhalation: fresh air. Immediately call in physician.<br>If breathing stops: immediately apply artificial respiration, if necessary also oxygen. |
| In case of skin contact                                     | : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.                           |
| In case of eye contact                                      | : After eye contact: rinse out with plenty of water. Call in ophthalmologist.<br>Remove contact lenses.                                                  |
| If swallowed                                                | : After swallowing: immediately make victim drink water (two glasses at most).<br>Consult a physician.                                                   |
| Most important symptoms and effects, both acute and delayed | : The most important known symptoms and effects are described in the labelling (see section 2 GHS label elements) and/or in section 11                   |
| Protection of first-aiders                                  | : For personal protection see section 8.                                                                                                                 |
| Notes to physician                                          | : No data available                                                                                                                                      |

---

## SECTION 5. FIREFIGHTING MEASURES

|                                       |                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------|
| Suitable extinguishing media          | : Foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry powder                      |
| Unsuitable extinguishing media        | : For this substance/mixture no limitations of extinguishing agents are given. |
| Specific hazards during fire fighting | : Combustible.                                                                 |

Pay attention to flashback.

Vapours are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

Hazardous combustion products : Carbon oxides

Nitrogen oxides (NO<sub>x</sub>)

Hydrogen iodide

Specific extinguishing methods : No data available

Further information : Remove container from danger zone and cool with water.  
Suppress (knock down) gases/vapours/mists with a water spray jet.  
Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for fire-fighters : Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Advice for non-emergency personnel:  
Do not breathe vapours, aerosols.  
Avoid substance contact.  
Ensure adequate ventilation.  
Keep away from heat and sources of ignition.  
Evacuate the danger area, observe emergency procedures, consult an expert.  
Advice for emergency responders:  
Wear appropriate personal protective equipment, as indicated in Section 8.

Environmental precautions : Do not let product enter drains.  
Risk of explosion.

Methods and materials for containment and cleaning up : Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

## SECTION 7. HANDLING AND STORAGE

For precautions see section 2 GHS label elements

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Advice on safe handling : Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Further information on storage conditions : Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Storage class : 3, Flammable liquids

Recommended storage temperature : Recommended storage temperature see product label.

Further information on storage stability : Recommended storage temperature see product label.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

| Components | CAS-No.   | Value type (Form of exposure)      | Control parameters / Permissible concentration | Basis     |
|------------|-----------|------------------------------------|------------------------------------------------|-----------|
| Pyridine   | 110-86-1  | TWA                                | 1 ppm                                          | ACGIH     |
|            |           | TWA                                | 5 ppm<br>15 mg/m <sup>3</sup>                  | NIOSH REL |
|            |           | TWA                                | 5 ppm<br>15 mg/m <sup>3</sup>                  | OSHA Z-1  |
| Iodine     | 7553-56-2 | C                                  | 0.1 ppm<br>1 mg/m <sup>3</sup>                 | OSHA Z-1  |
|            |           | TWA (Inhalable fraction and vapor) | 0.001 ppm                                      | ACGIH     |
|            |           | C                                  | 0.1 ppm                                        | NIOSH REL |

|  |  |  |                     |  |
|--|--|--|---------------------|--|
|  |  |  | 1 mg/m <sup>3</sup> |  |
|--|--|--|---------------------|--|

**Engineering measures** : No data available

### Personal protective equipment

Respiratory protection : required when vapours/aerosols are generated.  
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: : Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### Hand protection

Material : butyl-rubber  
Break through time : 240 min  
Glove thickness : 0.7 mm  
Protective index : Splash contact  
Manufacturer : Butoject® (KCL 898)

Remarks : This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Eye protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Safety glasses

Skin and body protection : Flame retardant antistatic protective clothing.

Hygiene measures : Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Millipore - BI0424

Page 7 of 18

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada

**Millipore  
Sigma**

|                                                     |                                         |
|-----------------------------------------------------|-----------------------------------------|
| Appearance                                          | : liquid                                |
| Colour                                              | : colourless                            |
| Odour                                               | : No data available                     |
| Odour Threshold                                     | : No data available                     |
| pH                                                  | : No data available                     |
| Melting point                                       | : No data available                     |
| Boiling point/boiling range                         | : No data available                     |
| Flash point                                         | : 68 °F / 20 °C                         |
|                                                     | Method: closed cup                      |
| Evaporation rate                                    | : No data available                     |
| Flammability (solid, gas)                           | : No data available                     |
| Flammability (liquids)                              | : No data available                     |
| Burning rate                                        | : No data available                     |
| Upper explosion limit /<br>Upper flammability limit | : No data available                     |
| Lower explosion limit /<br>Lower flammability limit | : No data available                     |
| Vapour pressure                                     | : No data available                     |
| Relative vapour density                             | : No data available                     |
| Relative density                                    | : No data available                     |
| Density                                             | : 1.0 g/cm <sup>3</sup> (68 °F / 20 °C) |
| Water solubility                                    | : No data available                     |
| Partition coefficient: n-<br>octanol/water          | : No data available                     |
| Autoignition temperature                            | : No data available                     |
| Decomposition<br>temperature                        | : No data available                     |
| Viscosity, dynamic                                  | : No data available                     |

Millipore - BI0424

Page 8 of 18



|                          |                                |
|--------------------------|--------------------------------|
| Viscosity, kinematic     | : No data available            |
| Flow time                | : No data available            |
| Explosive properties     | : Not classified as explosive. |
| Oxidizing properties     | : none                         |
| Particle characteristics |                                |
| Particle size            | : No data available            |

---

## SECTION 10. STABILITY AND REACTIVITY

|                                    |                                                                                           |
|------------------------------------|-------------------------------------------------------------------------------------------|
| Reactivity                         | : Vapours may form explosive mixture with air.                                            |
| Chemical stability                 | : The product is chemically stable under standard ambient conditions (room temperature) . |
| Possibility of hazardous reactions | : No data available                                                                       |
| Conditions to avoid                | : Warming.                                                                                |
| Incompatible materials             | : No data available                                                                       |
| Hazardous decomposition products   | : For Hazardous combustion products in the event of fire: see section 5                   |

---

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Mixture

##### Acute toxicity

Acute toxicity estimate Oral - 1,600 mg/kg  
(Calculation method)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity estimate Inhalation - 4 h - 11 mg/l - vapour (Calculation method)

Symptoms: Possible symptoms: , mucosal irritations

Acute toxicity estimate Dermal - 1,226 mg/kg  
(Calculation method)

##### Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

##### Serious eye damage/eye irritation

Remarks: Mixture causes serious eye irritation.

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**11.2 Additional Information**

No data available

**Components****Pyridine****Acute toxicity**

LD50 Oral - Rat - 1,500 mg/kg

Remarks: (ECHA)

Symptoms: Vomiting, Nausea

LC50 Inhalation - Rat - male - 4 h - 17.1 mg/l - vapour  
(US-EPA)

Symptoms: mucosal irritations, Cough, Shortness of breath

LD50 Dermal - Rabbit - > 1,000 - 2,000 mg/kg

(OECD Test Guideline 402)

No data available

**Skin corrosion/irritation**

Skin - Rabbit

Result: Mild skin irritation - 24 h

(Draize Test)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Irritating to eyes. - 24 h

Remarks: (ECHA)

**Respiratory or skin sensitization**

Local lymph node assay (LLNA) - Mouse

Result: negative  
(OECD Test Guideline 429)

**Germ cell mutagenicity**

Test Type: Ames test  
Test system: Salmonella typhimurium  
Result: negative  
Test Type: In vitro mammalian cell gene mutation test  
Test system: Chinese hamster lung cells  
Result: negative  
Method: OECD Test Guideline 475  
Species: Mouse - male - Bone marrow  
Result: negative

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

Acute oral toxicity - Vomiting, Nausea  
Acute inhalation toxicity - mucosal irritations, Cough, Shortness of breath

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Iodine**

**Acute toxicity**

LD50 Oral - Rat - 315 mg/kg  
(US-EPA)  
Remarks: The GHS classification specified by the authority  
LC50 Inhalation - Rat - male and female - 4 h - > 4.588 mg/l - dust/mist  
(OECD Test Guideline 403)  
Remarks: (Regulation (EC) No 1272/2008, Annex VI)  
LD50 Dermal - Rabbit - male and female - 1,425 mg/kg  
(US-EPA)  
No data available

**Skin corrosion/irritation**

Skin - reconstructed human epidermis (RhE)  
Result: Moderate skin irritation  
(Regulation (EC) No. 440/2008, Annex, B.46)

**Serious eye damage/eye irritation**

Remarks: Causes serious eye irritation.

**Respiratory or skin sensitization**

In animal experiments: - Mouse

Result: negative  
(OECD Test Guideline 429)

**Germ cell mutagenicity**

Test Type: Mutagenicity (mammal cell test):

Test system: Mouse lymphoma test

Result: negative

Method: Mutagenicity (micronucleus test)

Species: Mouse - male and female

Result: negative

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation. - Respiratory system

**Specific target organ toxicity - repeated exposure**

Oral - Causes damage to organs through prolonged or repeated exposure.

- Thyroid

Oral - Thyroid

**Aspiration hazard**

No data available

---

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **Pyridine:**

|                                                     |                                                                                                                                                                                                                               |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Toxicity to fish                                    | : EC50 (Danio rerio (zebra fish)): 560 - 1,000 mg/l<br>End point: mortality<br>Exposure time: 96 h<br>Test Type: semi-static test<br>Method: OECD Test Guideline 203<br>GLP: yes<br>Remarks: (in analogy to similar products) |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 (Daphnia magna (Water flea)): 320 mg/l<br>End point: Immobilization<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202<br>GLP: yes<br>Remarks: (in analogy to similar products)                                 |
| Toxicity to algae/aquatic plants                    | : EC50 (Pseudokirchneriella subcapitata): 320 mg/l<br>Exposure time: 72 h<br>Test Type: static test<br>Method: OECD Test Guideline 201                                                                                        |

GLP: yes  
Remarks: (in analogy to similar products)

**Iodine:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.67 mg/l  
Exposure time: 96 h  
Test Type: static test  
Remarks: (ECHA)
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.55 mg/l  
Exposure time: 48 h  
Test Type: static test  
Remarks: (ECHA)
- EC50 (Daphnia magna (Water flea)): 0.2 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 0.13 mg/l  
Exposure time: 72 h  
Test Type: Growth inhibition  
Method: OECD Test Guideline 201  
GLP: yes
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to microorganisms : EC50 (activated sludge): 280 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209  
GLP: yes

**Ecotoxicology Assessment**

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

**Persistence and degradability**

**Components:**

**Pyridine:**

Biodegradability : aerobic  
Inoculum: activated sludge  
Result: Readily biodegradable.  
Biodegradation: 97 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

**Iodine:**

Biodegradability : Remarks: The methods for determining the biological

degradability are not applicable to inorganic substances.

## **Bioaccumulative potential**

### **Components:**

#### **Pyridine:**

Partition coefficient: n-octanol/water : log Pow: ca. 0.64 (68 °F / 20 °C)  
pH: 7  
Method: (experimental)  
Remarks: (Lit.)  
Bioaccumulation is not expected.

#### **Iodine:**

Bioaccumulation : Remarks: No data available

## **Mobility in soil**

### **Components:**

#### **Iodine:**

Stability in soil : Remarks: No data available

## **Other adverse effects**

### **Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : Discharge into the environment must be avoided.

### **Components:**

#### **Pyridine:**

Results of PBT and vPvB assessment : Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

#### **Iodine:**

Results of PBT and vPvB assessment : Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

Additional ecological : No data available  
information

### **Endocrine disrupting properties**

No data available

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal methods**

Waste from residues : Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

---

## **SECTION 14. TRANSPORT INFORMATION**

### **International Regulations**

#### **IATA-DGR**

UN/ID No. : UN 1282  
Proper shipping name : Pyridine solution  
Class : 3  
Packing group : II  
Labels : Class 3 - Flammable liquids  
Packing instruction (cargo : 364  
aircraft)  
Packing instruction : 353  
(passenger aircraft)

#### **IMDG-Code**

UN number : UN 1282  
Proper shipping name : PYRIDINE  
  
Class : 3  
Packing group : II  
Labels : 3  
EmS Code : F-E, S-D  
Marine pollutant : no

### **Transport in bulk according to IMO instruments**

Not applicable for product as supplied.

### **National Regulations**

#### **49 CFR**

UN/ID/NA number : UN 1282  
Proper shipping name : Pyridine SOLUTION  
  
Class : 3  
  
Packing group : II

Labels : Class 3 - Flammable liquids  
 ERG Code : 129  
 Marine pollutant : no  
 Poison Inhalation Hazard : No

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

### CERCLA Reportable Quantity

| Components | CAS-No.  | Component RQ (lbs) | Calculated product RQ (lbs) |
|------------|----------|--------------------|-----------------------------|
| Pyridine   | 110-86-1 | 1000               | 1123                        |
| Pyridine   | 110-86-1 | 100                | 100 (F005)                  |
| Pyridine   | 110-86-1 | 1000               | 1000 (D038)                 |

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Pyridine 110-86-1 >= 70 - < 90 %

### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Pyridine 110-86-1 >= 70 - < 90 %

### Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act



## US State Regulations

### Massachusetts Right To Know

|          |           |
|----------|-----------|
| Pyridine | 110-86-1  |
| Iodine   | 7553-56-2 |

### Pennsylvania Right To Know

|          |           |
|----------|-----------|
| Pyridine | 110-86-1  |
| Iodine   | 7553-56-2 |

### Maine Chemicals of High Concern

Product does not contain any listed chemicals

### Vermont Chemicals of High Concern

Product does not contain any listed chemicals

### Washington Chemicals of High Concern

Product does not contain any listed chemicals

### California Prop. 65

WARNING: This product can expose you to chemicals including Pyridine, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). **The components of this product are reported in the following inventories:**

US TSCA : All substances listed as active on the TSCA inventory

### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

---

## SECTION 16. OTHER INFORMATION

### Full text of other abbreviations

|                 |                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------|
| ACGIH           | : USA. ACGIH Threshold Limit Values (TLV)                                                   |
| NIOSH REL       | : USA. NIOSH Recommended Exposure Limits                                                    |
| OSHA Z-1        | : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants          |
| ACGIH / TWA     | : 8-hour, time-weighted average                                                             |
| NIOSH REL / TWA | : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / C   | : Ceiling value not be exceeded at any time.                                                |
| OSHA Z-1 / TWA  | : 8-hour time weighted average                                                              |
| OSHA Z-1 / C    | : Ceiling                                                                                   |

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response;

EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Copyright 2025 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

Revision Date : 08/03/2026

US / EN