

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 31/03/2011 Revision date: 19/07/2018 Supersedes: 12/02/2018 Version: 7.0

DLM-272

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

1.1. Product identifier

Product form : Substance

Substance name : IODOETHANE-D5 (D, 99%) + COPPER WIRE

EC-No. : 200-833-1 (Unlabeled) CAS-No. : 75-03-6 (Unlabeled)

Product code : DLM-272
Formula : CD3CD2I
Synonyms : Ethyl iodide

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

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

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 <u>cilsales@isotope.com</u> www.isotope.com

### **Emergency telephone number**

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302 Skin Irrit. 2 H315 Eye Irrit. 2A H319 Resp. Sens. 1 H334 Skin Sens. 1 H317 STOT SE 3 H335

Full text of hazard classes and H-statements : see section 16

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36/37/38 Xn; R22 R42 R43

Full text of R-phrases: see section 16

#### **GHS-US** classification

Acute Tox. 4 (Oral) H302 Skin Irrit. 2 H315 Eye Irrit. 2A H319 Resp. Sens. 1 H334 Skin Sens. 1 H317 STOT SE 3 H335

Full text of H statements : see section 16

19/07/2018 EN (English US) 1/8

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

#### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





Signal word (CLP) : Danger

Hazard statements (CLP) : H302 - Harmful if swallowed H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

P261 - Avoid breathing dust, fume, gas, mist, spray, vapors. Precautionary statements (CLP) P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective clothing, protective gloves.

P284 - [In case of inadequate ventilation] wear Self contained breathing apparatus.

P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell.

#### **GHS-US** labeling

Hazard pictograms (GHS-US)





Signal word (GHS-US) : Danger

Hazard statements (GHS-US) H302 - Harmful if swallowed H315 - Causes skin irritation

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H335 - May cause respiratory irritation

P261 - Avoid breathing dust, fume, gas, mist, spray, vapors. Precautionary statements (GHS-US)

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace

P280 - Wear protective clothing, protective gloves.

P284 - [In case of inadequate ventilation] wear - Respiratory protection.

P301+P312 - If swallowed: Call a doctor if you feel unwell

P302+P352 - If on skin: Wash with plenty of water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P304+P341 - If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P312 - Call a doctor if you feel unwell

P321 - Specific treatment (see Hazardous component(s) for labeling on this label)

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention. P342+P311 - If experiencing respiratory symptoms: Call a doctor P362+P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

19/07/2018 EN (English US) 2/8

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

#### 2.3. Other hazards

No additional information available

# SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

| Name                                 | Product identifier  | %   | Classification according to<br>Directive 67/548/EEC  |
|--------------------------------------|---|-----|--|
| IODOETHANE-D5 (D, 99%) + COPPER WIRE | (CAS-No.) 75-03-6 (Unlabeled)<br>(EC-No.) 200-833-1 (Unlabeled)<br>(EC Index-No.) | 100 | Xi; R36/37/38<br>Xn; R22<br>R42<br>R43   |
| Name                                 | Product identifier  | %   | Classification according to Regulation (EC) No. 1272/2008 [CLP]  |
| IODOETHANE-D5 (D, 99%) + COPPER WIRE | (CAS-No.) 75-03-6 (Unlabeled)<br>(EC-No.) 200-833-1 (Unlabeled)<br>(EC Index-No.) | 100 | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>STOT SE 3, H335 |

Full text of R- and H- phrases: see section 16

| Name  | Product identifier            | %   | GHS-US classification   |
|---|-------------------------------|-----|---|
| IODOETHANE-D5 (D, 99%) + COPPER WIRE (Main constituent) | (CAS-No.) 75-03-6 (Unlabeled) | 100 | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>STOT SE 3, H335 |

Full text of H-phrases: see section 16

## 3.2. Mixtures

Not applicable

#### **SECTION 4: First aid measures**

| 4.4  | B 1 41      |              |            |
|------|-------------|--------------|------------|
| 4.1. | Description | of first aid | l measure: |

First-aid measures general

First-aid measures after inhalation

: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.

: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention. Remove victim to fresh air and keep at rest in

a position comfortable for breathing.

First-aid measures after skin contact : Wash with plenty of soap and water. Get immediate medical advice/attention. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get

of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label).

First-aid measures after eye contact : Rinse cautiously with water for several minutes.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : May be harmful if inhaled. May cause respiratory irritation. May cause an allergy or asthma

symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

### 5.2. Special hazards arising from the substance or mixture

No additional information available

19/07/2018 EN (English US) 3/8

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 5.3. Advice for firefighters

Firefighting instructions

: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.

# **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

**Emergency procedures** 

: Use personal protective equipment as required. Avoid breathing vapors, mist, gas. Avoid dust formation. Evacuate danger area. Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### **Environmental precautions**

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

#### Methods and material for containment and cleaning up

For containment

: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Contain large spillage with sand or earth.

Methods for cleaning up

: This material and its container must be disposed of in a safe way, and as per local legislation.

#### Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### Precautions for safe handling

Additional hazards when processed

: Avoid all eye and skin contact and do not breathe vapor and mist. Keep away from sources of ignition - No smoking.

Precautions for safe handling

Provide adequate ventilation to minimize dust and/or vapor concentrations. Avoid breathing vapors, spray, mist, gas, fume, dust. Use only outdoors or in a well-ventilated area.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands, forearms and face thoroughly after handling.

#### Conditions for safe storage, including any incompatibilities

Technical measures

: Store in a well-ventilated place. Keep container tightly closed.

: Store refrigerated (-5 C to 5 C). Protect from light. Storage conditions

#### Specific end use(s)

No additional information available

# **SECTION 8: Exposure controls/personal protection**

#### Control parameters

No additional information available

# **Exposure controls**

Appropriate engineering controls

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal protective equipment

Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing

Hand protection

Eve protection

Skin and body protection

Wear suitable protective clothing and gloves.

: Wear suitable protective clothing and gloves.

Wear eye protection. Chemical goggles or face shield with safety glasses.

Wear suitable protective clothing, gloves and eye/face protection. Wear suitable protective

Respiratory protection Environmental exposure controls : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

: Avoid release to the environment.

EN (English US) 19/07/2018 4/8

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

# **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid. Clear

Molecular mass : 161 g/mol (Labeled)

Color : Colorless

Odor : No data available
Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : -108 °C (-162 °F) - lit.
Freezing point : No data available

Boiling point :  $69 - 73 \,^{\circ}\text{C} \, (156 - 163 \,^{\circ}\text{F}) - \text{lit.}$  Flash point :  $> 72 \,^{\circ}\text{C} \, (> 162 \,^{\circ}\text{F}) - \text{closed cup}$ 

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : 177 hPa (133 mmHg) at 25 °C (77 °F)

Relative vapor density at 20 °C : 5.38 - (Air = 1.0)
Relative density : No data available

Specific gravity / density : 1.95 g/ml at 25 °C (77 °F)

Solubility No data available Log Pow : No data available No data available Log Kow Viscosity, kinematic No data available : No data available Viscosity, dynamic : No data available Explosive properties : No data available Oxidizing properties **Explosion limits** No data available

## 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No additional information available

# 10.2. Chemical stability

Stable if stored under recommended conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

# 10.4. Conditions to avoid

Moisture sensitive. Light sensitive.

#### 10.5. Incompatible materials

Strong oxidizing agents. Strong bases. magnesium.

# 10.6. Hazardous decomposition products

Carbon oxides (CO, CO2). hydrogen iodide.

# SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

| IODOETHANE-D5 (D, 99%) + COPPER WIRE (75-03-6 (Unlabeled)) |                           |
|--|---------------------------|
| LD50 oral rat  | 330 mg/kg                 |
| LC50 inhalation rat (mg/l)                                 | 65000 mg/m3 - 30 min      |
| ATE CLP (oral)   | 330.000 mg/kg body weight |
| ATE CLP (vapors)   | 65000.000 mg/l/4h         |
| ATE CLP (dust, mist)                                       | 65000.000 mg/l/4h         |

19/07/2018 EN (English US) 5/8

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation Causes serious eye irritation.

Respiratory or skin sensitization May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an

allergic skin reaction.

Germ cell mutagenicity Not classified : Not classified Carcinogenicity Reproductive toxicity : Not classified

Specific target organ toxicity - single exposure : May cause respiratory irritation.

Specific target organ toxicity - repeated

exposure

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms

: Narcosis. Coughing. Shortness of breath. Irritating. This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Liver - Irregularities - Based on Human Evidence.

May be harmful if inhaled. May cause respiratory irritation. May cause an allergy or asthma Symptoms/effects after inhalation

symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact Causes skin irritation. May cause an allergic skin reaction.

Causes serious eye irritation. Symptoms/effects after eye contact Symptoms/effects after ingestion : Harmful if swallowed.

## **SECTION 12: Ecological information**

#### 12.1. **Toxicity**

: The product is not considered harmful to aquatic organisms or to cause long-term adverse Ecology - general

effects in the environment.

#### Persistence and degradability

No additional information available

#### **Bioaccumulative potential**

No additional information available

# Mobility in soil

No additional information available

## Results of PBT and vPvB assessment

No additional information available

# Other adverse effects

No additional information available

### **SECTION 13: Disposal considerations**

#### Waste treatment methods 13.1.

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local

environmental control regulations.

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed Product/Packaging disposal recommendations

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

# **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

#### **UN** number

UN-No.(DOT) : NA1993 DOT NA no. NA1993

# **UN proper shipping name**

Proper Shipping Name (DOT) : Combustible liquid, n.o.s.

(lodoethane)

Class (DOT) : Combustible liquid 49 CFR 173.120

**DOT Symbols** : D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN

requiring a technical name

EN (English US) 19/07/2018 6/8

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)

: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T1 - 1.5 178.274(d)(2) Normal................. 178.275(d)(2) T4 - 2.65 178.274(d)(2) Normal.................................. 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241

#### 14.3. Additional information

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

#### **Overland transport**

No additional information available

#### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

#### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

# 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

# 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# SECTION 15: Regulatory information

## 15.1. US Federal regulations

| IODOETHANE-D5 (D, 99%) + COPPER WIRE (75-03-6 (Unlabeled))                |  |
|---|--|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |  |
| SARA Section 302 Threshold Planning Quantity (TPQ)                        | Not subject to reporting requirements of the United States SARA Section 302. |
| SARA Section 311/312 Hazard Classes                                       | Immediate (acute) health hazard Delayed (chronic) health hazard              |
| SARA Section 313 - Emission Reporting                                     | Not subject to reporting requirements of the United States SARA Section 313. |

#### 15.2. International regulations

# CANADA

# IODOETHANE-D5 (D, 99%) + COPPER WIRE (75-03-6 (Unlabeled))

Listed on the Canadian DSL (Domestic Substances List)

## 15.2.1. National regulations

No additional information available

19/07/2018 EN (English US) 7/8

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 15.3. US State regulations

| IODOETHANE-D5 (D, 99%) + COPPER WIRE(75-03-6 (Unlabeled))        |   |  |
|--|---|--|
| U.S California - Proposition 65 - Carcinogens List               | No  |  |
| U.S California - Proposition 65 - Developmental Toxicity         | No  |  |
| U.S California - Proposition 65 - Reproductive Toxicity - Female | No  |  |
| U.S California - Proposition 65 - Reproductive Toxicity - Male   | No  |  |
| State or local regulations                                       | U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List |  |

# **SECTION 16: Other information**

Other information

This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

# Full text of R-, H- and EUH-phrases:

| ·  |
|--|
| Acute toxicity (oral) Category 4   |
| Serious eye damage/eye irritation Category 2                                 |
| Respiratory sensitization, Category 1  |
| Skin corrosion/irritation Category 2   |
| Skin sensitization, Category 1   |
| Specific target organ toxicity (single exposure) Category 3                  |
| Harmful if swallowed   |
| Causes skin irritation   |
| May cause an allergic skin reaction  |
| Causes serious eye irritation  |
| May cause an allergy or asthma symptoms or breathing difficulties if inhaled |
| May cause respiratory irritation   |
| Harmful if swallowed   |
| Irritating to eyes, respiratory system and skin                              |
| May cause sensitization by inhalation  |
| May cause sensitization by skin contact                                      |
| Irritant   |
| Harmful  |
|  |

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause

significant irritation.

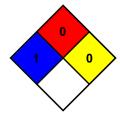
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



# **Hazard Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard Physical : 0 Minimal Hazard

## CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

19/07/2018 EN (English US) 8/8