

## SAFETY DATA SHEET

Creation Date 09-May-2012

Revision Date 24-Dec-2021

Revision Number 5

### 1. Identification

**Product Name** Dibromomethane

**Cat No. :** AC112830000; AC112830010; AC112830025; AC112831000;  
AC112835000

**CAS No** 74-95-3  
**Synonyms** Methylene bromide

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

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

##### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Inhalation Toxicity - Vapors

Category 4

#### Label Elements

##### **Signal Word**

Warning

##### **Hazard Statements**

Harmful if inhaled

**Precautionary Statements****Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell

**Hazards not otherwise classified (HNOC)**

Harmful to aquatic life with long lasting effects

### 3. Composition/Information on Ingredients

| Component         | CAS No  | Weight % |
|-------------------|---------|----------|
| Methylene bromide | 74-95-3 | >95      |

### 4. First-aid measures

|  |  |
|--|--|
| <b>General Advice</b>                      | If symptoms persist, call a physician.   |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.                              |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.                            |
| <b>Inhalation</b>                          | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.                                 |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water.   |
| <b>Most important symptoms and effects</b> | Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting |
| <b>Notes to Physician</b>                  | Treat symptomatically  |

### 5. Fire-fighting measures

|   |   |
|---|---|
| <b>Suitable Extinguishing Media</b>     | Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol-resistant foam. |
| <b>Unsuitable Extinguishing Media</b>   | No information available  |
| <b>Flash Point</b>                      | No information available  |
| <b>Method -</b>                         | No information available  |
| <b>Autoignition Temperature</b>         | No information available  |
| <b>Explosion Limits</b>                 |   |
| <b>Upper</b>                            | No data available   |
| <b>Lower</b>                            | No data available   |
| <b>Sensitivity to Mechanical Impact</b> | No information available  |

**Sensitivity to Static Discharge** No information available

### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

### Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen bromide.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

**Health**  
3

**Flammability**  
0

**Instability**  
0

**Physical hazards**  
N/A

## 6. Accidental release measures

### Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required.

### Environmental Precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

## 7. Handling and storage

### Handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing.

### Storage.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents. Metals.

## 8. Exposure controls / personal protection

### Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

#### Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

**Physical State**  
**Appearance**  
**Odor**

Liquid  
Colorless  
sweet

|  |                               |
|--|-------------------------------|
| Odor Threshold                         | No information available      |
| pH                                     | No information available      |
| Melting Point/Range                    | -52 °C / -61.6 °F             |
| Boiling Point/Range                    | 96 - 98 °C / 204.8 - 208.4 °F |
| Flash Point                            | No information available      |
| Evaporation Rate                       | No information available      |
| Flammability (solid,gas)               | Not applicable                |
| Flammability or explosive limits       |                               |
| Upper                                  | No data available             |
| Lower                                  | No data available             |
| Vapor Pressure                         | 15 mbar @ 20 °C               |
| Vapor Density                          | No information available      |
| Specific Gravity                       | 2.470                         |
| Solubility                             | Moderately soluble            |
| Partition coefficient; n-octanol/water | No data available             |
| Autoignition Temperature               | No information available      |
| Decomposition Temperature              | No information available      |
| Viscosity                              | No information available      |
| Molecular Formula                      | C H2 Br2                      |
| Molecular Weight                       | 173.83                        |

## 10. Stability and reactivity

|                                  |   |
|----------------------------------|---|
| Reactive Hazard                  | None known, based on information available                                |
| Stability                        | Stable under normal conditions.   |
| Conditions to Avoid              | Incompatible products.  |
| Incompatible Materials           | Strong oxidizing agents, Metals   |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Hydrogen bromide |
| Hazardous Polymerization         | Hazardous polymerization does not occur.                                  |
| Hazardous Reactions              | None under normal processing.   |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

| Component         | LD50 Oral         | LD50 Dermal        | LC50 Inhalation                                     |
|-------------------|-------------------|--------------------|---|
| Methylene bromide | 108 mg/kg ( Rat ) | >4 g/kg ( Rabbit ) | 5626 ppm/2 h (Rat)<br>40 g/m <sup>3</sup> /2h (Rat) |

**Toxicologically Synergistic Products** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                 |  |
|-----------------|--|
| Irritation      | No information available   |
| Sensitization   | No information available   |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component         | CAS No  | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-------------------|---------|------------|------------|------------|------------|------------|
| Methylene bromide | 74-95-3 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

|   |   |
|---|---|
| <b>Developmental Effects</b>                      | No information available.   |
| <b>Teratogenicity</b>                             | No information available.   |
| <b>STOT - single exposure</b>                     | None known  |
| <b>STOT - repeated exposure</b>                   | None known  |
| <b>Aspiration hazard</b>                          | No information available  |
| <b>Symptoms / effects, both acute and delayed</b> | Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting |
| <b>Endocrine Disruptor Information</b>            | No information available  |
| <b>Other Adverse Effects</b>                      | The toxicological properties have not been fully investigated.  |

## 12. Ecological information

### Ecotoxicity

Do not empty into drains. Do not flush into surface water or sanitary sewer system. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

|                                      |  |
|--------------------------------------|--|
| <b>Persistence and Degradability</b> | Soluble in water Persistence is unlikely based on information available. |
| <b>Bioaccumulation/ Accumulation</b> | No information available.  |
| <b>Mobility</b>                      | . Will likely be mobile in the environment due to its water solubility.  |

| Component         | log Pow |
|-------------------|---------|
| Methylene bromide | 1.7     |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component                   | RCRA - U Series Wastes | RCRA - P Series Wastes |
|-----------------------------|------------------------|------------------------|
| Methylene bromide - 74-95-3 | U068                   | -                      |

## 14. Transport information

### DOT

|                             |                |
|-----------------------------|----------------|
| <b>UN-No</b>                | UN2664         |
| <b>Proper Shipping Name</b> | DIBROMOMETHANE |
| <b>Hazard Class</b>         | 6.1            |
| <b>Packing Group</b>        | III            |

### TDG

|                             |                |
|-----------------------------|----------------|
| <b>UN-No</b>                | UN2664         |
| <b>Proper Shipping Name</b> | DIBROMOMETHANE |
| <b>Hazard Class</b>         | 6.1            |
| <b>Packing Group</b>        | III            |

### IATA

|                             |                |
|-----------------------------|----------------|
| <b>UN-No</b>                | UN2664         |
| <b>Proper Shipping Name</b> | DIBROMOMETHANE |
| <b>Hazard Class</b>         | 6.1            |
| <b>Packing Group</b>        | III            |

### IMDG/IMO

|                             |                |
|-----------------------------|----------------|
| <b>UN-No</b>                | UN2664         |
| <b>Proper Shipping Name</b> | DIBROMOMETHANE |

Hazard Class 6.1  
Packing Group III

## 15. Regulatory information

### United States of America Inventory

| Component         | CAS No  | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|-------------------|---------|------|---|-----------------------------|
| Methylene bromide | 74-95-3 | X    | ACTIVE  | -                           |

#### Legend:

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component         | CAS No  | DSL | NDSL | EINECS    | PICCS | ENCS | ISHL | AICS | IECSC | KECL     |
|-------------------|---------|-----|------|-----------|-------|------|------|------|-------|----------|
| Methylene bromide | 74-95-3 | X   | -    | 200-824-2 | X     | X    | X    | X    | X     | KE-09938 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### U.S. Federal Regulations

#### SARA 313

| Component         | CAS No  | Weight % | SARA 313 - Threshold Values % |
|-------------------|---------|----------|-------------------------------|
| Methylene bromide | 74-95-3 | >95      | 1.0                           |

**SARA 311/312 Hazard Categories** See section 2 for more information

#### CWA (Clean Water Act)

| Component         | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|-------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Methylene bromide | -                          | -                           | X                      | -                         |

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**CERCLA** This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component         | Hazardous Substances RQs | CERCLA EHS RQs |
|-------------------|--------------------------|----------------|
| Methylene bromide | 1000 lb                  | -              |

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

| Component         | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-------------------|---------------|------------|--------------|----------|--------------|
| Methylene bromide | X             | X          | X            | -        | -            |

**U.S. Department of Transportation**

Reportable Quantity (RQ): Y  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH****Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component         | CAS No  | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|-------------------|---------|----------|------------------------------|---------------------------|--|
| Methylene bromide | 74-95-3 | Listed   | Not applicable               | Not applicable            | Not applicable                             |

| Component         | CAS No  | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|-------------------|---------|---|--|----------------------------|------------------------------------|
| Methylene bromide | 74-95-3 | Not applicable  | Not applicable   | Not applicable             | Annex I - Y45                      |

## 16. Other information

**Prepared By** Regulatory Affairs  
 Thermo Fisher Scientific  
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**Creation Date** 09-May-2012  
**Revision Date** 24-Dec-2021  
**Print Date** 24-Dec-2021  
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**