

# SAFETY DATA SHEET

Revision Date 24-Dec-2021

**Revision Number** 4

| 1. Identification   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Product Name  | oduct Name 1-Bromohexadecane   |  |  |  |  |  |
| Cat No. :   | AC215430000; AC215430010; AC215430050; AC215432500   |  |  |  |  |  |
| Synonyms  | Cetyl bromide; Hexadecyl bromide   |  |  |  |  |  |
| Recommended Use<br>Uses advised against   | Laboratory chemicals.<br>Food, drug, pesticide or biocidal product use.  |  |  |  |  |  |
| Details of the supplier of the safety   | data sheet   |  |  |  |  |  |
| <u>Company</u><br>Fisher Scientific Company<br>One Reagent Lane<br>Fair Lawn, NJ 07410<br>Tel: (201) 796-7100 | Acros Organics<br>One Reagent Lane<br>Fair Lawn, NJ 07410  |  |  |  |  |  |
| Emergency Telephone Number  | For information <b>US</b> call: 001-800-ACROS-01 / <b>Europe</b> call: +32 14 57 52 11<br>Emergency Number <b>US</b> :001-201-796-7100 / <b>Europe</b> : +32 14 57 52 99<br><b>CHEMTREC</b> Tel. No. <b>US</b> :001-800-424-9300 / <b>Europe</b> :001-703-527-3887 |  |  |  |  |  |

### 2. Hazard(s) identification

#### Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

None required

Hazards not otherwise classified (HNOC) None identified

3. Composition/Information on Ingredients

| Component   | CAS N   | lo    | Weight % |  |  |  |
|---|---|-------|----------|--|--|--|
| Hexadecane, 1-bromo   | 112-82  | -3    | 97       |  |  |  |
|   | 4. First-aid meas   | sures |          |  |  |  |
| <b>Example 2</b> Provide the system of the system |   |       |          |  |  |  |
| Skin Contact  | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.  |       |          |  |  |  |
| Inhalation  | alation Remove from exposure, lie down. Remove to fresh air.  |       |          |  |  |  |
| Clean mouth with water. Get medical attention.  |   |       |          |  |  |  |
| Most important symptoms and<br>effects<br>Notes to Physician  | Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms lik<br>headache, dizziness, tiredness, nausea and vomiting<br>Treat symptomatically |       |          |  |  |  |

5. Fire-fighting measures

| Suitable Extinguishing Media                 | Water spray. Carbon dioxide (CO $_2$ ). Dry chemical. Chemical foam. |
|--|--|
| Unsuitable Extinguishing Media               | No information available   |
| Flash Point                                  | 177 °C / 350.6 °F  |
| Method -                                     | No information available   |
| Autoignition Temperature<br>Explosion Limits | No information available   |
| Upper  | No data available  |
| Lower  | No data available  |
| Sensitivity to Mechanical Impac              | t 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 halides.

#### 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<br>Health<br>0                               | Flammability<br>0   | Instability<br>0  | Physical hazards<br>N/A |
|---|---|---|-------------------------|
|   | 6. Accidental re  | lease measures  |                         |
| Personal Precautions<br>Environmental Precautions | Ensure adequate ventilatio<br>See Section 12 for addition | n. Use personal protective equ<br>nal Ecological Information. | ipment as required.     |

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Up

7. Handling and storage

| Handling<br>Storage.          | Avoid contact with skin and eyes. Do not breathe mist/vapors/spray.<br>Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible<br>Materials. Strong oxidizing agents. Strong bases. |
|-------------------------------|--|
| 8. E                          | xposure controls / personal protection   |
| Exposure Guidelines           | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.   |
| Engineering Measures          | None under normal use conditions.  |
| 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.  |
| <b>Respiratory Protection</b> | No protective equipment is needed under normal use conditions.   |
| Hygiene Measures              | Handle in accordance with good industrial hygiene and safety practice.   |

9. Physical and chemical properties

| Physical State                         | Liquid                   |
|--|--------------------------|
| Appearance                             | Amber                    |
| Odor                                   | No information available |
| Odor Threshold                         | No information available |
| рН                                     | No information available |
| Melting Point/Range                    | 17.3 °C / 63.1 °F        |
| Boiling Point/Range                    | 336 °C / 636.8 °F        |
| Flash Point                            | 177 °C / 350.6 °F        |
| Evaporation Rate                       | No information available |
| Flammability (solid,gas)               | Not applicable           |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | <1 mmHg @ 20 °C          |
| Vapor Density                          | No information available |
| Specific Gravity                       | 0.999                    |
| Solubility                             | No information available |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               | No information available |
| Decomposition Temperature              | No information available |
| Viscosity                              | No information available |
| Molecular Formula                      | C16 H33 Br               |
| Molecular Weight                       | 305.33                   |
|  |                          |

# 10. Stability and reactivity

| Reactive Hazard     | None known, based on information available |
|---------------------|--|
| Stability           | Stable under normal conditions.            |
| Conditions to Avoid | Incompatible products.                     |

| ncompatible Materials Strong oxidizing agents, Strong bases |                                |   |                               |  |  |  |  |
|---|--------------------------------|---|-------------------------------|--|--|--|--|
| Hazardous Decomposition Prod                                | lucts Carbon monoxide (CO), Ca | arbon dioxide (CO2), Hydrogen hali          | des                           |  |  |  |  |
| Hazardous Polymerization                                    | Hazardous polymerization       | does not occur.                             |                               |  |  |  |  |
| Hazardous Reactions   | None under normal process      | sing.                                       |                               |  |  |  |  |
|   | 11. Toxicologic                | al information                              |                               |  |  |  |  |
| Acute Toxicity  |                                |   |                               |  |  |  |  |
|   |                                |   |                               |  |  |  |  |
| Product Information<br>Component Information                | No acute toxicity informatio   | n is available for this product             |                               |  |  |  |  |
|   | No acute toxicity informatio   | n is available for this product LD50 Dermal | LC50 Inhalation               |  |  |  |  |
| Component Information                                       |                                |   | LC50 Inhalation<br>Not listed |  |  |  |  |
| Component Information<br>Component                          | LD50 Oral                      | LD50 Dermal                                 |                               |  |  |  |  |

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     |  |  |  |
|--|---------------|--|------------|------------|------------|------------|--|--|--|
| Hexadecane, 1-bromo-                     | 112-82-3      | Not listed   | Not listed | Not listed | Not listed | Not listed |  |  |  |
| Mutagenic Effects                        |               | No information available   |            |            |            |            |  |  |  |
| Reproductive Effects                     |               | No information available.  |            |            |            |            |  |  |  |
| Developmental Effe                       | cts           | No information ava   | ailable.   |            |            |            |  |  |  |
| Teratogenicity No information available. |               |  |            |            |            |            |  |  |  |
| STOT - single expos                      |               | None known   |            |            |            |            |  |  |  |
| STOT - repeated ex                       | posure        | None known   |            |            |            |            |  |  |  |
| Aspiration hazard                        |               | No information available   |            |            |            |            |  |  |  |
|  |               | Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, |            |            |            |            |  |  |  |
| delayed                                  |               | tiredness, nausea and vomiting   |            |            |            |            |  |  |  |
| Endocrine Disrupto                       | r Information | No information available   |            |            |            |            |  |  |  |
| Other Adverse Effe                       | cts           | The toxicological properties have not been fully investigated.                       |            |            |            |            |  |  |  |
|  |               |  |            |            |            |            |  |  |  |

12. Ecological information

Ecotoxicity Do not empty into drains.

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Persistence and Degradability
                                      Insoluble in water
Bioaccumulation/Accumulation
                                      No information available.
Mobility
                                      Is not likely mobile in the environment due its low water solubility.
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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.

| 14. Transport information |                            |  |  |  |  |
|---------------------------|----------------------------|--|--|--|--|
| DOT                       | Not regulated              |  |  |  |  |
| DOT<br>TDG                | Not regulated              |  |  |  |  |
| IATA                      | Not regulated              |  |  |  |  |
| IMDG/IMO                  | Not regulated              |  |  |  |  |
|                           | 15. Regulatory information |  |  |  |  |

#### United States of America Inventory

| Component            | CAS No   | TSCA | TSCA Inventory notification -<br>Active-Inactive | TSCA - EPA Regulatory<br>Flags |
|----------------------|----------|------|--|--------------------------------|
| Hexadecane, 1-bromo- | 112-82-3 | Х    | 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     |
|----------------------|----------|-----|------|-----------|-------|------|------|------|-------|----------|
| Hexadecane, 1-bromo- | 112-82-3 | -   | Х    | 204-008-7 | Х     | Х    | Х    | Х    | Х     | KE-03673 |

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

#### U.S. Federal Regulations

| SARA 313   | Not applicable  |
|--|---|
| SARA 311/312 Hazard Categories   | See section 2 for more information                          |
| CWA (Clean Water Act)  | Not applicable  |
| Clean Air Act  | Not applicable  |
| <b>OSHA</b> - Occupational Safety and Health Administration  | Not applicable  |
| CERCLA   | Not applicable  |
| California Proposition 65  | This product does not contain any Proposition 65 chemicals. |
| U.S. State Right-to-Know<br>Regulations  | Not applicable  |
| <b>U.S. Department of Transportation</b><br>Reportable Quantity (RQ):<br>DOT Marine Pollutant<br>DOT Severe Marine Pollutant | N<br>N<br>N   |

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

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<br>Pollutant | Ozone Depletion<br>Potential | Restriction of<br>Hazardous<br>Substances (RoHS) |
|----------------------|----------|----------------------|---------------------------------|------------------------------|--|
| Hexadecane, 1-bromo- | 112-82-3 | Not applicable       | Not applicable                  | Not applicable               | Not applicable                                   |
| Component            | CASNo    | Seveso III Directive | Seveso III Directive            | Rotterdam                    | Basel Convention                                 |

|   | Component            | CAS No   | Seveso III Directive         | Seveso III Directive         | Rotterdam        | Basel Convention  |
|---|----------------------|----------|------------------------------|------------------------------|------------------|-------------------|
|   |                      |          | (2012/18/EC) -               | (2012/18/EC) -               | Convention (PIC) | (Hazardous Waste) |
|   |                      |          | <b>Qualifying Quantities</b> | <b>Qualifying Quantities</b> |                  | ,                 |
|   |                      |          | for Major Accident           | for Safety Report            |                  |                   |
|   |                      |          | Notification                 | Requirements                 |                  |                   |
| [ | Hexadecane, 1-bromo- | 112-82-3 | Not applicable               | Not applicable               | Not applicable   | Not applicable    |

|                  | 16. Other information   |
|------------------|---|
| Prepared By      | Regulatory Affairs  |
|                  | Thermo Fisher Scientific  |
|                  | Email: EMSDS.RA@thermofisher.com  |
| 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**