

SAFETY DATA SHEET

Revision Date 26-Mar-2024 Revision Number 3

1. Identification

Product Name Benzyltri-n-butylammonium bromide

Cat No. : L05786

CAS No 25316-59-0

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **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)

Skin Corrosion/IrritationCategory 2Serious Eye Damage/Eye IrritationCategory 2Specific target organ toxicity (single exposure)Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation

May cause respiratory irritation



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

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

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

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

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|--------------------------------|------------|----------|
| Benzyltributylammonium bromide | 25316-59-0 | 99 |

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention.

Inhalation Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Get medical attention.

Ingestion Clean mouth with water. Get medical attention.

Most important symptoms and

effects

No information available.

Notes to Physician 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 No information available No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact 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

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2). 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.

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 1 | 1 | N/A |

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the **Up** environment.

| 7 | Handling | and | storage | _ |
|----|----------|-----|---------|---|
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Handling Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then

seek immediate medical assistance.

Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible

Materials. Strong oxidizing agents. Oxidizing agent.

8. Exposure 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 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 protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection 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 StatePowder SolidAppearanceOff-whiteOdorOdorless

Odor Threshold No information available

pH No information available

Melting Point/Range 168 - 174 °C / 334.4 - 345.2 °F

Boiling Point/Range No information available Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNot applicable

Specific Gravity

Solubility

No information available
No information available

Partition coefficient; n-octanol/water

Autoignition Temperature

No data available

No information available

Autoignition Temperature

No information available

Decomposition Temperature

No information available

ViscosityNot applicableMolecular FormulaC19 H34 Br NMolecular Weight356.38

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions. Hygroscopic.

Conditions to Avoid Incompatible products. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Oxidizing agent

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Hydrogen halides

Hazardous Polymerization No information available.

Hazardous ReactionsNone under normal processing.

11. Toxicological information

Acute Toxicity

Product InformationNo acute toxicity information is available for this product

Component Information

Toxicologically Synergistic No information available

Products

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 |
|-----------------------|------------|------------|------------|------------|------------|------------|
| Benzyltributylammoniu | 25316-59-0 | Not listed |
| m bromide | | | | | | |

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

No information available **Aspiration hazard**

Symptoms / effects,both acute and No information available

delayed

No information available **Endocrine Disruptor Information**

Other Adverse Effects The toxicological properties have not been fully investigated.

Not regulated

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

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 TDG | Not regulated | |
| ΙΔΤΔ | Not regulated | |

15. Regulatory information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags | |
|--------------------------------|------------|------|---|-----------------------------|--|
| Benzyltributylammonium bromide | 25316-59-0 | = | - | - | |

Legend:

IMDG/IMO

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

X - Listed

^{&#}x27;-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

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 |
|--------------------------------|------------|-----|------|-----------|-------|------|------|------|-------|------|
| Benzyltributylammonium bromide | 25316-59-0 | - | - | 246-819-9 | - | • | | Χ | Х | - |

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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Not applicable

Health Administration

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

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

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
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 Not applicable

| | Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|----|------------------------------|------------|---|---|---|
| Ве | nzyltributylammonium bromide | 25316-59-0 | - | - | - |

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) |
|--------------------------------|------------|----------------|---------------------------------|------------------------------|--|
| Benzyltributylammonium bromide | 25316-59-0 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities | Seveso III Directive (2012/18/EC) - | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|--------------------------------|------------|---|--|-------------------------------|------------------------------------|
| | | for Major Accident Notification | for Safety Report Requirements | | |
| Benzyltributylammonium bromide | 25316-59-0 | Not applicable | Not applicable | Not applicable | Not applicable |

| 16 | Other i | nformation | |
|-----|---------|------------|--|
| 10. | | HIOHHALIOH | |

Prepared By Health, Safety and Environmental Department

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www.thermofisher.com

Revision Date 26-Mar-2024 Print Date 26-Mar-2024

Revision Summary New emergency telephone response service provider.

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