

Safety Data Sheet

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

Identification of the substance or mixture

Product code TS-38831
Product name BSTFA + 1% TMCS, 10 x 1ml

Company/undertaking identification

Life Technologies Corporation
5781 Van Allen Way
PO Box 6482
Carlsbad, CA 92008
+1 760 603 7200

Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

Thermo Fisher Scientific
Pierce Biotechnology
P.O. Box 117
Rockford, IL 61105
United States
1.815.968.0747 or
1.800.874.3723

24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC Within the USA + Canada: 1-800-424-9300 and 1-703-527-3887
Outside the USA + Canada: 1-703-741-5970

Country Specific Emergency Number (if available):

For research use only. Not for use in diagnostic procedures

SECTION 2: Hazards identification

GHS Classification

Signal Word
DANGER

Hazard pictograms



Health hazards

| | |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |

Physical hazards

| | |
|-------------------------------------|-------------------|
| GHS Physical Hazard | Flammable liquids |
| GHS Physical Hazard Category Number | Category 3 |

Environmental hazards

Not Hazardous

Hazard Statements

H226 - Flammable liquid and vapor
 H314 - Causes severe skin burns and eye damage

Precautionary Statements

Prevention

P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P264 - Wash hands thoroughly after handling
 P233 - Keep container tightly closed
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray

Response

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a POISON CENTER or doctor/physician
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

Storage

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

Disposal

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

Other hazards

Not Applicable

HMIS

| | |
|--------------|---|
| Health | 3 |
| Flammability | 3 |
| Reactivity | 0 |

SECTION 3: Composition/information on ingredients

| Chemical Name | CAS No. | Common name | EINECS-No | Weight-% |
|---|------------|-------------|-----------|----------|
| Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate | 25561-30-2 | - | - | 98-100 |
| Chlorotrimethylsilane | 75-77-4 | - | - | 0.1 - 1 |

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Description of first aid measures

| | |
|---------------------------|--|
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. |
| Ingestion | Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician. |
| Notes to Physician | Treat symptomatically. |

Most important symptoms and effects, both acute and delayed

H226 - Flammable liquid and vapor H314 - Causes severe skin burns and eye damage

Indication of any immediate medical attention and special treatment needed

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media
Unsuitable extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.
No information available.

Special hazards arising from the substance or mixture

None known

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Avoid contact with skin, eyes or clothing
Use personal protection equipment
See section 8 for more information

Environmental precautions

No special environmental precautions required. Avoid discharge into drains and waterways whenever possible.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Always wear recommended Personal Protective Equipment. See section 8 for more information. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

| Chemical Name | OSHA PEL | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|---|----------|--------------------|-----------------|------------------|
| Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate | None | None | None | None |
| Chlorotrimethylsilane | None | None | None | None |

| Chemical Name | Brazil - OEL - TWAs (LTs) | Brazil - OEL - Ceilings | Brazil - OEL - Skin Designations |
|---|---------------------------|-------------------------|----------------------------------|
| Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate | None | None | None |
| Chlorotrimethylsilane | None | None | None |

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

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| | |
|--|---|
| Respiratory protection | In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards. |
| Hand protection | Wear suitable gloves. Glove material: Compatible chemical-resistant gloves. |
| Eye protection | Tight sealing safety goggles. |
| Skin and Body Protection | Wear suitable protective clothing. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice |
| Environmental exposure controls | No special environmental precautions required. |

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | | |
|---|---------------------------|------------|
| Appearance | liquid | |
| Color | Colorless to light yellow | |
| Odor | No data | |
| Odor Threshold | No data | |
| Molecular Weight | No data | |
| pH | No data | |
| Melting point / melting range | °C No data | °F No data |
| Boiling point / boiling range | °C No data | °F No data |
| Flash point | °C No data | °F No data |
| Autoignition Temperature | °C No data | °F No data |
| Decomposition temperature | °C No data | °F No data |
| Evaporation rate | No data | |
| Flammability (solid, gas) | No data | |
| Upper explosion limit | No data | |
| Lower explosion limit | No data | |
| Vapor Pressure | No data | |
| Vapor density | No data | |
| Relative density | No data | |
| Specific gravity | No data | |
| Solubility | Cold water and hot water. | |
| Partition coefficient: n-octanol/water | No data | |
| Viscosity | No data | |
| Explosive properties | No data | |
| Oxidizing properties | No data | |

Other information
No data.

SECTION 10: Stability and reactivity

| | |
|---|---|
| Reactivity | None known. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous reaction has not been reported. |
| Conditions to avoid | Proximity to sources of ignition. High temperature. |
| Incompatible materials | No dangerous reaction known under conditions of normal use. |
| Hazardous decomposition products | No known hazardous decomposition products. |

SECTION 11: Toxicological information

Information on toxicological effects

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|--------------------|-------------------|-------------------|
| Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acet imidate | No data available | No data available | No data available |
| Chlorotrimethylsilane | = 5660 µL/kg (Rat) | No data available | =12.9mg/L(Rat) |

Principal Routes of Exposure

| | |
|--|--|
| Acute toxicity | Data are conclusive but insufficient for classification. |
| Skin corrosion/irritation | Causes severe burns |
| Serious eye damage/irritation | Causes serious eye damage |
| Respiratory or skin sensitization | Data are conclusive but insufficient for classification |
| Specific target organ toxicity (STOT) – single exposure | Data are conclusive but insufficient for classification |
| Specific target organ toxicity (STOT) – repeated exposure | Data are conclusive but insufficient for classification |
| Carcinogenicity | Data are conclusive but insufficient for classification |
| Germ cell mutagenicity | Data are conclusive but insufficient for classification |
| Reproductive toxicity | Data are conclusive but insufficient for classification |
| Aspiration hazard | Data are conclusive but insufficient for classification |

SECTION 12: Ecological information

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish | Microtox Data | log Pow |
|--|-------------------|---|-------------------|-------------------|-------------------|
| Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate | No data available | No data available | No data available | No data available | No data available |
| Chlorotrimethylsilane | No data available | No data available | No data available | No data available | logPow3 |

Mobility in soil No information available.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

This product is subject to the de minimis exceptions for dangerous goods / hazardous materials in accordance with the following regulations: IATA 2.6.10, ADR 3.5.1.4, and U.S. DOT 49 CFR 173.4b.

| | |
|-----------------------------------|--|
| UN number | 2924 |
| UN proper shipping name | Flammable liquid, corrosive, n.o.s. (Trimethylsilyl 2,2,2-Trifluoro-N-(Trimethylsilyl) Acetimidate, Chlorotrimethylsilane) |
| Transport hazard class(es) | 3 (8) |
| Packing group | II |

Environmental hazards

Not Hazardous

Special precautions for user

Not Applicable

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

Not Applicable.

SECTION 15: Regulatory information

| Component | US TSCA |
|---|---------|
| Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate 25561-30-2 (98-100) | - |
| Chlorotrimethylsilane 75-77-4 (0.1 - 1) | Listed |

US Federal Regulations**SARA 313**

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

E - Corrosive material

B3 - Combustible liquid

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations - Brazil

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>Brazil - National Agency for Sanitary Surveillance (ANVISA)</u> | <u>Brazil - National List of Carcinogen Agents to Humans (LINACH)</u> |
|--|----------------|--|---|
| Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate | 25561-30-2 | Not Listed | Not Listed |
| Chlorotrimethylsilane | 75-77-4 | Not Listed | Not Listed |

SECTION 16: Other information

Reason for revision SDS sections updated.
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References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

Abbreviations and acronyms

TWA - Time-Weighted Average

OELs - Occupational Exposure Limits

STEL - Short Term Exposure Limit

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

CEPA - Canadian Environmental Protection Act

EPA - Environmental Protection Agency

OSHA - Occupational Safety and Health Administration of the US Department of Labor

IATA - International Air Transport Association

DOT - Department of Transportation

IMDG - International Maritime Dangerous Goods

ACGIH - American Conference of Governmental Industrial Hygienists

NIOSH - National Institute for Occupational Safety and Health

AIHA - American Industrial Hygiene Association

HMIS - Department of Defense Hazardous Materials Information System

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet