

Safety Data Sheet

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

Product identifier

Product code TS-38834

Product name BSTFA +1% TMCS; 100 g

Chemical Name Not Applicable

REACH registration number No registration number is given yet for this substance / substances in this mixture

since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet

expired.

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses For research use only

Use Description Code SU22 - Professional uses: Public domain (administration, education,

entertainment, services, craftsmen), PROC15 - Use as laboratory reagent, PC21 -

Laboratory chemicals, SU24 - Scientific research and development

Uses advised against Not for consumer use.

Details of the supplier of the safety data sheet

Manufacturer / Supplier

LIFE TECHNOLOGIES EUROPE BV

KWARTSWEG 2 2665 NN BLEISWIJK NETHERLANDS 31-(0)180 392 400

Email: MSDS@lifetech.com

Life Technologies Limited

3 Fountain Drive

Inchinnan Business Park

Paislev

PA4 9RF, UK

+44 (0)141 814 6100

Thermo Fisher Scientific Pierce Biotechnology

P.O. Box 117 Rockford, IL 61105 United States 1.815.968.0747 or

1.800.874.3723

[or Dangerous Goods] Incident. Spill, Leak, Fire, 1-703-527-3887

Exposure, or Accident. Call CHEMTRECOutside the USA + Canada: 1-703-741-5970

24 hour Emergency Response for Hazardous Materials Within the USA + Canada: 1-800-424-9300 and

Country Specific Emergency Number (if available):

CHEMTREC Ireland (Dublin) +(353)-19014670 (Greeting Language: English and Irish)

CHEMTREC UK (London) +(44)-870-8200418 (Greeting Language: English)

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www.thermofisher.com

SECTION 2: Hazards identification

Classification of the substance or mixture

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

Physical hazards

Flammable liquids Category 3	
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Health hazards

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

Environmental hazards

Not classified

Additional information

No information available

Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms



Signal Word

Danger

Hazard Statements

H226 - Flammable liquid and vapour

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/vapours/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

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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

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SECTION 3: Composition/information on ingredients

Chemical Name	CAS No	EINECS-No.	Weight-%	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimid ate	25561-30-2	-	98-100	+	Flamm Liq. 3- H226 Skin. irri.1 - H314
Chlorotrimethylsilane	75-77-4	-	0.1 - 1	-	Not classified

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 doctor.

Notes to Physician Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H226 - Flammable liquid and vapour 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 adequate ventilation and/or wear appropriate respirator.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labelled 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	EU OEL (TWA)	EU OEL (STEL)	EU Skin Notation
Trimethylsilyl	None	None	None
2,2,2-trifluoro-N-(trimethylsilyl)aceti			
midate			
25561-30-2			
Chlorotrimethylsilane	None	None	None
75-77-4			

Chemical Name	Austria	Belgium (TWA)	Czech Republic
Trimethylsilyl	None	None	None
2,2,2-trifluoro-N-(trimethylsilyl)aceti			
midate			
25561-30-2			
Chlorotrimethylsilane	None	None	None
75-77-4			

Chemical Name	Denmark (TWA)	Finland OEL (TWA)	France OEL (VME)
Trimethylsilyl	None	None	None
2,2,2-trifluoro-N-(trimethylsilyl)aceti			
midate			
25561-30-2			
Chlorotrimethylsilane	None	None	None
75-77-4			

Chemical Name	Germany OEL (TWA)	Ireland (TWA)	Italy OEL (TWA)
Trimethylsilyl	None	None	None
2,2,2-trifluoro-N-(trimethylsilyl)aceti			
midate			
25561-30-2			
Chlorotrimethylsilane	None	None	None
75-77-4			

Chemical Name	Lithuania OEL (TWA)	Netherlands OEL (MAC)	Norway
Trimethylsilyl	None	None	None
2,2,2-trifluoro-N-(trimethylsilyl)aceti			
midate			
25561-30-2			
Chlorotrimethylsilane	None	None	None
75-77-4			

Chemical Name	Poland	Portugal	Spain OEL (TWA)
Trimethylsilyl	ethylsilyl None None		None
2,2,2-trifluoro-N-(trimethylsilyl)aceti			
midate			
25561-30-2			
Chlorotrimethylsilane	None	None	None
75-77-4			

Chemical Name	Chemical Name Sweden - Occupational Exposure Limits - TLVs (LLVs)		United Kingdom
Trimethylsilyl	None	None	None
2,2,2-trifluoro-N-(trimethylsilyl)aceti			
midate			
25561-30-2			
Chlorotrimethylsilane	None	None	None
75-77-4			

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

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Exposure controls

Personal protection equipment

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 MeasuresHandle 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

Colorless to light yellow

Odour No data
Odour Threshold No data
Molecular Weight No data
pH No data
No data

Melting point / melting range°CNo data°FNo dataBoiling point / boiling range°CNo data°FNo dataFlash point°CNo data°FNo dataAutoignition Temperature°CNo data°FNo dataDecomposition temperature°CNo data°FNo data

Evaporation rate No data Flammability (solid, gas) No data **Upper explosion limit** No data Lower explosion limit No data **Vapour Pressure** No data Vapour density No data Relative density No data Specific gravity No data

Solubility Cold water and hot water.

Partition coefficient: No data

n-octanol/water

Viscosity No data
Explosive properties No data
Oxidising properties No data

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Other information

No data.

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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 materialsNo 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	No data available	No data available	No data available	
2,2,2-trifluoro-N-(trimethylsilyl)acet				
imidate				
Chlorotrimethylsilane	= 5660 μL/kg (Rat)	No data available	=12.9mg/L(Rat)	

Principal Routes of Exposure

Skin corrosion/irritation Causes severe burns

Serious eye damage/irritation Causes serious eye damage

Respiratory or skin

sensitisation

Data are conclusive but insufficient for classification

Specific target organ toxicity Data are conclusive but insufficient for classification (STOT) – single exposure

Specific target organ toxicity Data are conclusive but insufficient for classification (STOT) – repeated exposure

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	No data available	No data available	No data available	No data available	No data available
2,2,2-trifluoro-N-(trimethylsilyl) acetimidate					
acetimidate					
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

No information available.

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 according to 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

Classified as dangerous in the meaning of transport regulations

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

Environmental hazards

Not Hazardous

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Special precautions for user

Not Applicable

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

Not Applicable.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Substances of Very High Concern

None.

Substance subject to authorisation per REACH Annex XIV None

Restricted substances under EC 1907/2006, Annex XVII None.

Substances listed under Annex I of Regulation (EC) No 689/2008 None.

Restricted substances under Annex V of Regulation (EC) No 689/2008 None.

Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC None.

German Water hazard classes (Wassergefährdungsklassen)

Chemical Name	Weight-%	Water hazard class (WGK)
Chlorotrimethylsilane	0.1 - 1	hazard class 1 - slightly hazardous to water

Other International Inventories

Chemical Name	EINECS (European Union)	ELINCS (European List of Notified Chemical Substances)	ENCS (Japan)	PICCS (Philippines)
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	Listed	-	Listed	-
Chlorotrimethylsilane	Listed	-	Listed	Listed

Chemical Name	AICS (Australia)	South Korea (KECL)	Canada (DSL)	NDSL
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	-	-	-	-
Chlorotrimethylsilane	Listed	Listed	Listed	-

Chemical safety assessment

No Chemical safety assessment has been carried out.

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SECTION 16: Other information

Reason for revision Update according to Commission Regulation (EU) No 830/2015

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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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flammable liquids

Category 3

Calculation method

Skin corrosion/irritation

Category 1

Calculation method

Category 1

Calculation method

Calculation method

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 Labour

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"

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