

## 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 Product name	TS-38829 Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate
Chemical Name REACH registration number	Not Applicable 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 Use Description Code	For research use only 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 Paisley 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
24 hour Emergency Response for Hazardous M [or Dangerous Goods] Incident. Spill, Leak, Fir Exposure, or Accident. Call CHEMTREC	Materials Within the USA + Canada: 1-800-424-9300 and   re, 1-703-527-3887   Outside the USA + Canada: 1-703-741-5970
Country Specific Emergency Number (if availa CHEMTREC Ireland (Dublin) +(353)-1	<b>ble):</b> 9014670 (Greeting Language: English and Irish)

CHEMTREC Ireland (Dublin)	+(353)-19014670 (Greeting Language: English and Irish)
CHEMTREC UK (London)	+(44)-870-8200418 (Greeting Language: English)

#### 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

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

#### Environmental hazards

Not classified

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## 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 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

#### 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

#### 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. **Extinguishing media** 

Suitable extinguishing media Unsuitable extinguishing media Water spray. Carbon dioxide (CO<sub>2</sub>). 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 2,2,2-trifluoro-N-(trimethylsilyl)aceti midate 25561-30-2	None	None	None
Chemical Name	Austria	Belgium (TWA)	Czech Republic
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)aceti midate 25561-30-2	None	None	None
Chemical Name	Denmark (TWA)	Finland OEL (TWA)	France OEL (VME)
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)aceti midate 25561-30-2	None	None	None
Chemical Name	Germany OEL (TWA)	Ireland (TWA)	Italy OEL (TWA)
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)aceti midate 25561-30-2	None	None	None
Chemical Name	Lithuania OEL (TWA)	Netherlands OEL (MAC)	Norway
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)aceti midate 25561-30-2	None	None	None
Chemical Name	Poland	Portugal	
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)aceti midate 25561-30-2	None	None	Spain OEL (TWA) None
Chemical Name	Sweden - Occupational Exposure Limits - TLVs (LLVs)	Switzerland	United Kingdom
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)aceti midate 25561-30-2	None	None	None

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 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 Colour Odour Odour Threshold Molecular Weight pH Melting point / melting range Boiling point / boiling range Flash point Autoignition Temperature Decomposition temperature Evaporation rate Flammability (solid, gas)	liquid Colorless to light yellow No data No data No data °C -10 °C 45 to 50 °C 23 °C >300 °C No data <1 (butyl acetate = 1) Highly flammable in open flames, sparks Non-flammable in the presence shocks a Containers should be grounded.	
Upper explosion limit	No data	
Lower explosion limit	No data	
Vapour Pressure Vapour density	<0.13 kPa (<1 mm Hg) [room temperatu >1 [Air = 1]	liej
Relative density	0.969	
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	
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	No data available	No data available	No data available		
2,2,2-trifluoro-N-(trimethylsilyl)acet imidate					
inidate		I			
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 bu	ut insufficient for classification			
Germ cell mutagenicity	Data are conclusive bu	ut insufficient for classification			
Reproductive Toxicity	Data are conclusive but insufficient for classification				
Aspiration Hazard	Data are conclusive bu	ut insufficient for classification			
	SECTION 12: Ecc	logical 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					

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 UN proper shipping name

Transport hazard class(es) Packing group

2924 Flammable liquid, corrosive, n.o.s. (N,O-Bis (Trimethylsilyl)Trifluoroacetamide) (Trimethylsilyl 2,2,2-Trifluoro-N-(Trimethylsilyl) Acetimidate) 3 (8)

#### Environmental hazards Not Hazardous

#### 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) Not classified.

#### **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	-

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

#### **Chemical safety assessment**

No Chemical safety assessment has been carried out.

#### SECTION 16: Other information

Reason for revision	Update according to Commission Regulation (EU) No 830/2015
Revision number	2
Revision date	28-Jun-2020

#### 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
Serious eye damage/eye irritation	Category 1	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"