SAFETY DATA SHEET

Revision Date 24-Nov-2010 **Revision Number** 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: **Lithium (trimethylsilyl)acetylide, 0.5M solution in THF**
Cat No. **380650000; 380651000; 380658000**
Synonyms (Trimethylsilyl)ethynyl lithium

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company
Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number
For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
REGULATION (EC) No 1272/2008

Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3
Flammable liquids.	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC
For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s) F - Highly flammable
Xi - Irritant
R -phrase(s) R11 - Highly flammable
R14 - Reacts violently with water
R19 - May form explosive peroxides
Risk Combination Phrases R36/37/38 - Irritating to eyes, respiratory system and skin

2. HAZARDS IDENTIFICATION

Label Elements

Signal Word **Danger**

Hazard Statements
H335 - May cause respiratory irritation
H319 - Causes serious eye irritation
H225 - Highly flammable liquid and vapor
EUH019 - May form explosive peroxides

Precautionary Statements - EU (§28, 1272/2008)
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P233 - Keep container tightly closed
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P240 - Ground/Bond container and receiving equipment

Other Hazards
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
Tetrahydrofuran 109-99-9	EEC No. 203-726-8	95	109-99-9	F;R11 R19 Xi;R36/37	Flam. Liq. 2 (H225) Eye Irrit. 2 (H319) STOT SE 3 (H335) [EUH019]	-

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Obtain medical attention Discard contaminated shoes Take off contaminated clothing and shoes immediately

Ingestion Never give anything by mouth to an unconscious person Drink plenty of water Call a physician immediately Clean mouth with water Get medical attention If possible drink milk afterwards

Inhalation Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Obtain medical attention

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray Carbon dioxide (CO_2) Dry chemical Use water spray to cool unopened containers chemical foam

Extinguishing media which must not be used for safety reasons

Water may be ineffective

Special hazards arising from the substance or mixture

Flammable Contact with water liberates toxic gas Water reactive Vapors may travel to source of ignition and flash back Produce flammable gases on contact with water

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust) Keep in suitable and closed containers for disposal Remove all sources of ignition Use spark-proof tools and explosion-proof equipment

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist Avoid contact with clothing Do not ingest Use only in area provided with appropriate exhaust ventilation Keep away from heat, sparks and open flame. - No smoking Keep containers dry and tightly closed to avoid moisture absorption and contamination

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed Keep cool and protect from sunlight Flammables area Store under an inert atmosphere Regularly check inhibitor levels to maintain peroxide levels below 1% Keep away from heat, sparks and open flame. - No smoking Store in original container Keep away from oxidizing agents

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure limits

Component	European Union	The United Kingdom	France	Belgium	Spain
Tetrahydrofuran			VME: 150 mg/m³ VME: 50 ppm VLCT: 100 ppm VLCT: 300 mg/m³	STEL: 100 ppm STEL: 300 mg/m³ TWA: 150 mg/m³ TWA: 50 ppm	VLA-EC: 100 ppm VLA-EC: 300 mg/m³ VLA-ED: 50 ppm VLA-ED: 150 mg/m³

Component	Italy	Portugal	The Netherlands	Finland	Denmark
Tetrahydrofuran	TWA: 150 mg/m³ TWA: 50 ppm STEL: 100 ppm STEL: 300 mg/m³	STEL: 100 ppm TWA: 50 ppm	STEL: 600 mg/m³ TWA: 300 mg/m³	TWA: 150 mg/m³ TWA: 50 ppm STEL: 300 mg/m³ STEL: 100 ppm	TWA: 148 mg/m³ TWA: 50 ppm

Component	Austria	Switzerland	Poland	Norway	Ireland
Tetrahydrofuran	STEL: 300 mg/m³ STEL: 100 ppm MAK: 150 mg/m³ MAK: 50 ppm	STEL: 300 mg/m³ STEL: 100 ppm MAK: 150 mg/m³ MAK: 50 ppm	NDSCh: 300 mg/m³ NDS: 150 mg/m³	TWA: 150 mg/m³ TWA: 50 ppm	TWA: 118 mg/m³ TWA: 40 ppm STEL: 295 mg/m³ STEL: 100 ppm Skin

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

Engineering Measures Use explosion-proof electrical/ventilating/lighting/equipment Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment

Eye Protection Goggles

Hand Protection Protective gloves

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid

Appearance Yellow-orange

pH No information available.

Boiling Point/Range No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Melting Point/Range	No information available.
Flash Point	No information available.
Water Solubility	reacts
Specific Gravity	0.880
Molecular Formula	C5 H9 Li Si
Molecular Weight	104.15

10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

May form explosive peroxides. Stable under normal conditions. Reacts with air to form peroxides. Moisture sensitive. Air sensitive.

Possibility of Hazardous Reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions .	No information available.

Conditions to Avoid

Excess heat, Exposure to air, Exposure to light, Exposure to moist air or water.

Incompatible Materials

Bases, Strong oxidizing agents, Oxidizing agents, Bromine.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO_2). Silicon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tetrahydrofuran	1650 mg/kg (Rat)		180 mg/L (Rat) 1 h 53.9 mg/L (Rat) 4 h

Chronic Toxicity

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Sensitization	No information available.
Mutagenic Effects	No information available
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target Organs	No information available.
Other Adverse Effects	The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

Endocrine Disruptor Information

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Tetrahydrofuran	Group III Chemical		

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity effects

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Tetrahydrofuran		Leuciscus idus: LC50: 2820 mg/L/48h		EC50: >10000 mg/L/24h

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Component	log Pow
Tetrahydrofuran	0.45

Mobility in soil

Results of PBT and vPvB assessment

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No 2056
Hazard Class 3
Packing Group II
Proper Shipping Name TETRAHYDROFURAN, SOLUTION

ADR

UN-No 2056
Hazard Class 3
Packing Group II
Proper Shipping Name TETRAHYDROFURAN

14. TRANSPORT INFORMATION

IATA

UN-No	2056
Hazard Class	3
Packing Group	II
Proper Shipping Name	TETRAHYDROFURAN

15. REGULATORY INFORMATION

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

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Tetrahydrofuran	203-726-8	-		T	X	-	X	X	X	X	KE-33454 X

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory Lists
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
CHINA - China Inventory of Existing Chemical Substances
AICS - Inventory of Chemical Substances
KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

16. OTHER INFORMATION

Text of R phrases mentioned in Section 2-3

R11 - Highly flammable
R14 - Reacts violently with water
R19 - May form explosive peroxides
R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 24-Nov-2010
Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Safety Data Sheet