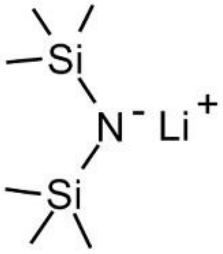
TECHNICAL DATA SHEET

Date of Issue: 2025/10/21

Lithium Hexamethyldisilazide (LHMDS), typ. 20 % solution in THF / Ethylbenzene (typ. 1.1 M)



CAS-No.	4039-32-1
EC-No.	223-725-6
REACH No.	01-2119913303-51-0000
Molecular formula	$LiN[Si(CH_3)_3]_2$
Product number	10001489, 10001490, 10001491, 10001492, 10001493, 10001494

APPLICATION

Selective low nucleophilic base for e. g. enolisations.

FURTHER INGREDIENTS

ethylbenzene

CAS-No.	100-41-4
EC-No.	202-849-4

SPECIFICATION

LHMDS (active base)	19 - 21 %

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METHOD OF ANALYSIS

Thermometric titration with 2-butanol for the determination of active base. Potentiometric titration of the methanolized product for the determination of total base. Detailed description available on request.

PHYSICAL PROPERTIES

Appearance	liquid
Colour	slight yellow to brown
	clear to slight milky cloudy
Crystallization temperature	< -5 °C
Flash point	-21.2 °C 1,013 hPa (Tetrahydrofuran)
Boiling point/boiling range	65 °C at 1,013 hPa (Tetrahydrofuran)
Density	ca. 0.9 g/cm3 at 20 °C
Water solubility	(Not applicable)
Molecular weight	167.33 g/mol

HANDLING & STORAGE

Handling	LHMDS should be handled under inert gas atmosphere. Avoid contact with eyes, skin and clothes as well as inhalation. Vapors may form explosive mixtures with air. Vapors are heavier than air and may spread along floors. Flashback possible over considerable distance. Use only explosion-proof equipment. Take measures against electrostatic discharges. LHMDS decomposes in contact with humidity. In case of fire use dry extinguishers on basis of sodium chloride or limestone powder. Never use water or CO2-extinguishers. Pay also attention to the Safety Data Sheet.

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Storage

LHMDS should be stored in tightly closed containers under exclusion of humidity at gentle temperatures. LHMDS starts to form crystalline precipitates on cooling below about -5 °C. Recommended storage temperature: min. 0 °C. When stored according to SDS the material is fairly stable. We still recommend to retest the material 12 months after date of analysis if included on CoA. If not included, use the date of manufacturing for the calculation.
Keep away from heat, sparks and fire. Pay also attention to the Safety Data Sheet.

TRANSPORT & PACKAGING

UN number 2924

ADR	Class: 3	PG: II	Label: 3 (8)
RID	Class: 3	PG: II	Label: 3 (8)
IMDG	Class: 3	PG: II	Label: 3 (8)
IATA_C	Class: 3	PG: II	Packing instruction (cargo aircraft): 363
IATA_P	Class: 3	PG: II	Packing instruction (passenger aircraft): 352

Hazard pictograms

Signal word

Danger

H&P Phrases

See Safety Data Sheet

Labelling

The labelling is according to EU-GHS classification ((EG) 1272/2008) and may vary in other countries. Please refer to the respective Safety Data Sheet for your country.

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Packaging

Glass bottles of 1000 ml. Steel bottles and containers with volumes of 27, 127 or 450 l. For safety reasons these are filled to a maximum of 90 %. Steel drums with 200 l net volume.

OTHER INFORMATION

Further Related Documents	Safety Data Sheet

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