

Safety Data Sheet SIS6980.2

Date of issue: 16/09/2015 Revision date: 11/06/2019 Version: 1.1

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

#### **Product identifier**

Product form : Mixture Physical state : Liquid

: SODIUM BIS(TRIMETHYLSILYL)AMIDE, 2M in tetrahydrofuran Product name

Product code SIS6980.2 Formula C6H18NNaSi2

N-SODIOHEXAMETHYLDISILAZANE; SILANAMINE, 1,1,1-TRIMETHYL-N-Synonyms

(TRIMETHYLSILYL)-, SODIUM SALT

: ORGANOSILANE IN SOLVENT Chemical family

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Chemical intermediate

#### Uses advised against

No additional information available

#### Details of the supplier of the safety data sheet

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#### **Emergency telephone number**

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

#### **SECTION 2: Hazards identification**

## Classification of the substance or mixture

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

Flammable liquids, Category 2 H225 Skin corrosion/irritation, Category 1B H314 Serious eye damage/eye irritation, Category 1 H318 H351 Carcinogenicity, Category 2 Specific target organ toxicity — Single exposure, Category 3, H335

Respiratory tract irritation

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)

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EN (English)





GHS07



GHS02 GHS05

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Signal word (CLP)

Hazardous ingredients : Tetrahydrofuran; Sodium bis(trimethylsilyl)amide; Hexamethyldisilazane

: H225 - Highly flammable liquid and vapour. Hazard statements (CLP)

H314 - Causes severe skin burns and eye damage.

H335 - May cause respiratory irritation. H351 - Suspected of causing cancer.

Precautionary statements (CLP) P202 - Do not handle until all safety precautions have been read and understood.

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.

P240 - Ground/bond container and receiving equipment. P271 - Use only outdoors or in a well-ventilated area.

P310 - Immediately call a POISON CENTER or doctor/physician

**EUH-statements** : EUH019 - May form explosive peroxides.

#### Other hazards

No additional information available

#### **SECTION 3: Composition/information on ingredients**

#### **Substances**

Not applicable

#### 3.2. **Mixtures**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tetrahydrofuran	(CAS-No.) 109-99-9 (EC-No.) 203-726-8 (EC Index-No.) 603-025-00-0	56 - 62	Flam. Liq. 2, H225 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335
Sodium bis(trimethylsilyl)amide	(CAS-No.) 1070-89-9 (EC-No.) 213-983-8	38 - 44	Flam. Sol. 2, H228 Skin Corr. 1B, H314 Eye Dam. 1, H318
Hexamethyldisilazane	(CAS-No.) 999-97-3 (EC-No.) 213-668-5	0 - 2	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation:vapour), H332

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
Tetrahydrofuran	(CAS-No.) 109-99-9	( 25 = <c 100)="" 2,="" <="" eye="" h319<="" irrit.="" th=""></c>
	(EC-No.) 203-726-8	( 25 = <c 100)="" 3,="" <="" h335<="" se="" stot="" td=""></c>
	(EC Index-No.) 603-025-00-0	

Full text of H-statements; see section 16

#### **SECTION 4: First aid measures**

#### **Description of first aid measures**

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible). If possible show this sheet; if not

available show packaging or label. Call a POISON CENTER/doctor.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical

advice.

First-aid measures after skin contact : Wash with plenty of water/.... Get immediate medical advice/attention.

: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if First-aid measures after eye contact

present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Never give anything by mouth to an unconscious person. Get medical advice/attention if you First-aid measures after ingestion

#### Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes severe skin burns and eye damage. May cause cancer.

: May cause respiratory irritation. Inhalation will cause sneezing, irritation and burns. Symptoms/effects after inhalation

Symptoms/effects after skin contact : Causes (severe) skin burns. If skin and air are dry, powder on skin may not cause irritation or

burns. Worker will notice a slippery feeling on washing. However, if moisture is present, the

powder can cause severe burns.

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Symptoms/effects after eye contact

: Causes serious eye damage.

Symptoms/effects after ingestion

: May be harmful if swallowed.

: TETRAHYDROFURAN: Mildly toxic by inhalation. Mutagenic data has been reported. Reported Chronic symptoms

as causing injury to liver and kidneys.

#### Indication of any immediate medical attention and special treatment needed

No additional information available

#### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

: Foam. Carbon dioxide. Dry chemical. Suitable extinguishing media

Unsuitable extinguishing media : Avoid water spray as flammable gases will be generated.

#### Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. Irritating fumes and caustic vapors may develop when

material is exposed to elevated temperatures or open flame.

**Explosion hazard** : May form flammable/explosive vapour-air mixture.

#### Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Protect against caustic dust, smoke and

Do not enter fire area without proper protective equipment, including respiratory protection. Protection during firefighting

Avoid all eye and skin contact and do not breathe vapour and mist. Wear pressure demand

self-contained breathing apparatus with full facepiece and full protective clothing.

Sodium bis(trimethylsilyl)amide is a flammable solid. It has been reported to ignite Other information

spontaneously if heated to >170°C in air.

#### **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

General measures : Eliminate every possible source of ignition. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel

Protective equipment Wear protective equipment as described in Section 8.

Evacuate unnecessary personnel. **Emergency procedures** 

#### For emergency responders 6.1.2.

Protective equipment Do not attempt to take action without suitable protective equipment. Equip cleanup crew with

proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

**Emergency procedures** Ventilate area

#### **Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### Methods and material for containment and cleaning up

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or For containment

Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or Methods for cleaning up

shovel spills into appropriate container for disposal. Use only non-sparking tools.

#### Reference to other sections

See Heading 8. Exposure controls and personal protection.

#### **SECTION 7: Handling and storage**

#### Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable. Keep away from

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Precautions for safe handling Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid all eye and skin contact and do not breathe vapour and mist. Ground/bond container and receiving equipment. Take precautionary measures against static

discharge. Use only outdoors or in a well-ventilated area. Use only non-sparking tools. Wash hands and other exposed areas with mild soap and water before eating, drinking or

Hygiene measures smoking and when leaving work. Wash contaminated clothing before reuse.

#### Conditions for safe storage, including any incompatibilities

: Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof Technical measures

electrical equipment.

Storage conditions Keep container tightly closed. Store under dry nitrogen or argon in sealed containers. Keep in a

cool place. Store locked up.

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Incompatible materials : Acids. alcohols. Carbon dioxide. Esters. Halogens. Ketones. Moist air. Water.

Storage area : Store in a well-ventilated place. Store away from heat.

#### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

#### 3.1. Control parameters

Tetrahydrofuran (109-99-9)		
EU	IOELV TWA (mg/m³)	150 mg/m³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m³)	300 mg/m³
EU	IOELV STEL (ppm)	100 ppm
Austria	MAK (mg/m³)	150 mg/m³
Austria	MAK (ppm)	50 ppm
Austria	MAK Short time value (mg/m³)	300 mg/m³
Austria	MAK Short time value (ppm)	100 ppm
Belgium	Limit value (mg/m³)	150 mg/m³
Belgium	Limit value (ppm)	50 ppm
Belgium	Short time value (mg/m³)	300 mg/m³
Belgium	Short time value (ppm)	100 ppm
Bulgaria	OEL TWA (mg/m³)	150 mg/m³
Bulgaria	OEL TWA (ppm)	50 ppm
Bulgaria	OEL STEL (mg/m³)	100 mg/m³
Bulgaria	OEL STEL (ppm)	300 ppm
Cyprus	OEL TWA (mg/m³)	150 mg/m <sup>3</sup>
Cyprus	OEL TWA (ppm)	50 ppm
Cyprus	OEL STEL (mg/m³)	300 mg/m <sup>3</sup>
Cyprus	OEL STEL (ppm)	100 ppm
France	VLE (mg/m³)	300 mg/m³ (restrictive limit)
France	VLE (ppm)	100 ppm (restrictive limit)
France	VME (mg/m³)	150 mg/m³ (restrictive limit)
France	VME (ppm)	50 ppm (restrictive limit)
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	150 mg/m³ (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 900 Occupational exposure limit value (ppm)	50 ppm (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Germany	TRGS 903 Biological limit value	2 mg/l (Medium: urine - Time: end of shift - Parameter: Tetrahydrofuran)
Gibraltar	Eight hours mg/m3	150 mg/m³
Gibraltar	Eight hours ppm	50 ppm
Gibraltar	Short-term mg/m3	300 mg/m³
Gibraltar	Short-term ppm	100 ppm
Greece	OEL TWA (mg/m³)	590 mg/m³
Greece	OEL TWA (ppm)	200 ppm
Greece	OEL STEL (mg/m³)	735 mg/m³
Greece	OEL STEL (ppm)	250 ppm
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	100 ppm
Italy	OEL TWA (mg/m³)	150 mg/m³
Italy	OEL TWA (ppm)	50 ppm
Italy	OEL STEL (mg/m³)	300 mg/m³
Italy	OEL STEL (ppm)	100 ppm
Latvia	OEL TWA (mg/m³)	150 mg/m³
Latvia	OEL TWA (ppm)	50 ppm
USA IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	590 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm
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Tetrahydrofuran (109-99-9)		
USA NIOSH	NIOSH REL (STEL) (mg/m³)	735 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	590 mg/m³
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USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
Spain	VLA-ED (mg/m³)	150 mg/m³ (indicative limit value)
Spain	VLA-ED (ppm)	50 ppm (indicative limit value)
Spain	VLA-EC (mg/m³)	300 mg/m³
Spain Switzerland	VLA-EC (ppm)  KZGW (mg/m³)	100 ppm 300 mg/m³
Switzerland	KZGW (ng/n-)	100 ppm
Switzerland	MAK (mg/m³)	150 mg/m³
Switzerland	MAK (ppm)	50 ppm
Netherlands	Grenswaarde TGG 8H (mg/m³)	300 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	600 mg/m³
United Kingdom	WEL TWA (mg/m³)	150 mg/m³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m³)	300 mg/m³
United Kingdom	WEL STEL (ppm)	100 ppm
Czech Republic	Expoziční limity (PEL) (mg/m³)	150 mg/m³
Denmark	Grænseværdie (langvarig) (mg/m³)	150 mg/m³
Denmark	Grænseværdie (langvarig) (ppm)	50 ppm
Finland	HTP-arvo (8h) (mg/m³)	150 mg/m³
Finland	HTP-arvo (8h) (ppm)	50 ppm
Finland	HTP-arvo (15 min)	300 mg/m³
Finland	HTP-arvo (15 min) (ppm)	100 ppm
Hungary	AK-érték	150 mg/m³
Hungary	CK-érték	300 mg/m³
Ireland	OEL (8 hours ref) (mg/m³)	150 mg/m³
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m3)	300 mg/m³
Ireland	OEL (15 min ref) (ppm)	100 ppm
Lithuania	IPRV (mg/m³)	150 mg/m³
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m³)	300 mg/m³
Lithuania	TPRV (ppm)	100 ppm
Malta	OEL TWA (mg/m³)	150 mg/m³
Malta	OEL TWA (ppm)	50 ppm
Malta	OEL STEL (mg/m³)	300 mg/m³
Malta	OEL STEL (ppm)	100 ppm
Norway	Grenseverdier (AN) (mg/m³)	150 mg/m³
Norway	Grenseverdier (AN) (ppm)	50 ppm
Norway	Grenseverdier (Korttidsverdi) (mg/m3)	150 mg/m³
Norway	Grenseverdier (Korttidsverdi) (ppm)	50 ppm
Poland	NDS (mg/m³)	150 mg/m³
Poland	NDSCh (mg/m³)	300 mg/m³
Romania	OEL TWA (mg/m³)	150 mg/m³
Romania	OEL TWA (ppm)	50 ppm
Romania	OEL STEL (mg/m³)	300 mg/m³
Romania	OEL STEL (ppm)	100 ppm
Slovakia	NPHV (priemerná) (mg/m³)	150 mg/m³
Slovakia	NPHV (priemerná) (ppm)	50 ppm

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Tetrahydrofuran (109-99-9)			
Slovakia	NPHV (Hraničná) (mg/m³)		300 mg/m <sup>3</sup>
Sweden	nivågränsvärde (NVG) (mg/m	3)	150 mg/m³
Sweden	nivågränsvärde (NVG) (ppm)		50 ppm
Sweden	kortidsvärde (KTV) (mg/m³)		250 mg/m³
Sweden	kortidsvärde (KTV) (ppm)		80 ppm
Canada (Quebec)	VEMP (mg/m³)		300 mg/m³
Canada (Quebec)	VEMP (ppm)		100 ppm
Australia	TWA (mg/m³)		295 mg/m³
Australia	TWA (ppm)		100 ppm
Portugal	OEL TWA (mg/m³)		150 mg/m³ (indicative limit value)
Portugal	OEL TWA (ppm)		50 ppm (indicative limit value)
Portugal	OEL STEL (mg/m³)		300 mg/m³ (indicative limit value)
Portugal	OEL STEL (ppm)		100 ppm (indicative limit value)
Portugal	OEL chemical category (PT)		A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans,skin - potential for cutaneous exposure indicative limit value
Hexamethyldisilazane (999-97-3)			
Latvia	OEL TWA (mg/m³)		2 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)		35 ppm (ammonia)
Lithuania	IPRV (mg/m³)		2 mg/m³

#### 8.2. Exposure controls

#### Appropriate engineering controls:

Provide local exhaust or general room ventilation.

#### Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Hand protection:

Neoprene or nitrile rubber gloves

## Eye protection:

Chemical goggles or face shield. Contact lenses should not be worn

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor - amine gas (brown cartridge) respirator.

#### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Solution.
Molecular mass : 183.37 g/mol
Colour : Straw-yellow. Amber.

Odour : Mild.

Odour threshold : No data available

Refractive index : No additional information available

pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : 165 - 167 °C (neat solid)
Freezing point : No data available
Boiling point : 66 °C initial (THF)

Flash point : -14 °C

Auto-ignition temperature : No data available

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Decomposition temperature : No data available

Flammability (solid, gas) : Highly flammable liquid and vapour.

Vapour pressure : No data available

Relative vapour density at 20 °C Relative density % Volatiles : > 75 %

Solubility : Insoluble in water. Reacts rapidly with water.

Log Pow : No data available Log Kow No data available No data available Viscosity, kinematic Viscosity, dynamic No data available Explosive properties No data available Oxidising properties No data available : No data available Explosive limits

#### Other information

No additional information available

#### SECTION 10: Stability and reactivity

#### Reactivity

No additional information available

#### 10.2. **Chemical stability**

Stable under nitrogen or argon in sealed containers.

#### Possibility of hazardous reactions

Material decomposes slowly in contact with moist air and rapidly in contact with water, possibly igniting

#### **Conditions to avoid**

Heat. Open flame. Sparks.

#### 10.5. Incompatible materials

Acids. alcohols. Carbon dioxide. Esters. Halogens. Ketones. Moist air. Water.

#### **Hazardous decomposition products**

Ammonia. Caustic organic vapors. Hexamethyldisiloxane. Sodium hydroxide.

#### **SECTION 11: Toxicological information**

#### Information on toxicological effects

: Not classified Acute toxicity

Tetrahydrofuran (109-99-9)		
LD50 oral rat		1650 mg/kg
LC50 inhalation rat (ppm)		21000 ppm (Exposure time: 3 h)
ATE CLP (oral)		1650 mg/kg bodyweight
Hexamethyldisilazane (999-97-3)		
LD50 oral rat		847 mg/kg
LD50 dermal rabbit		544 mg/kg
LC50 inhalation rat (mg/l)		12.2 mg/l (male and female, 6 hour) OECD Test Guideline 403
LDLo intraperitioneal rat		650 mg/kg
ATE CLP (oral)		847 mg/kg bodyweight
ATE CLP (dermal)		544 mg/kg bodyweight
ATE CLP (vapours)		12.2 mg/l/4h
ATE CLP (dust,mist)		12.2 mg/l/4h
Skin corresion/irritation	· Causes severe skin hurns	and ava damaga

Skin corrosion/irritation Causes severe skin burns and eve damage.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified

: Suspected of causing cancer. Carcinogenicity

National Toxicology Program (NTP) Status	
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	National Toxicology Program (NTP) Status

Tetrahydrofuran (109-99-9)

1 - Evidence of Carcinogenicity

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

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STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause respiratory irritation. Inhalation will cause sneezing, irritation and burns.

Symptoms/effects after skin contact : Causes (severe) skin burns. If skin and air are dry, powder on skin may not cause irritation or

burns. Worker will notice a slippery feeling on washing. However, if moisture is present, the

powder can cause severe burns.

Symptoms/effects after eye contact : Causes serious eye damage. Symptoms/effects after ingestion : May be harmful if swallowed.

Chronic symptoms : TETRAHYDROFURAN: Mildly toxic by inhalation. Mutagenic data has been reported. Reported

as causing injury to liver and kidneys.

Reason for classification : Expert judgment

#### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - water : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity : Not classified Chronic aquatic toxicity : Not classified

Tetrahydrofuran (109-99-9)	
LC50 fish 1	1970 - 2360 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	2700 - 3600 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Hexamethyldisilazane (999-97-3	
LC50 fish 1	88 mg/l (Exposure time: 96 h - Species: Brachydanio rerio (zebrafish))
EC50 Daphnia 1	80 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 (algae)	80 mg/l esmodesmus subspicatus (green algae), Static, 72 Hour

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

Tetrahydrofuran (109-99-9)	
BCF fish 1	(will not bioconcentrate)
Log Pow	0.45 (at 25 °C)

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to licensed waste disposal facility.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

#### **SECTION 14: Transport information**

#### 14.1. UN number

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR) : 2924 UN-No. (IMDG) : 2924 UN-No. (IATA) : 2924 UN-No. (ADN) : 2924 UN-No. (RID) : 2924

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

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Proper Shipping Name (IMDG) : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Proper Shipping Name (IATA) : Flammable liquid, corrosive, n.o.s.

Proper Shipping Name (ADN) : FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (RID) : FLAMMABLE LIQUID, CORROSIVE, N.O.S.

Transport document description (ADR) : UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (SODIUM BIS(TRIMETHYLSILYL)AMIDE, 2M in tetrahydrofuran), 3 (8), II, (D/E)

LIN 2024 ELAMMARI ELICUID CORROSIVE N.O.S. (SODIUM

Transport document description (IMDG) : UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (SODIUM

BIS(TRIMETHYLSILYL)AMIDE, 2M in tetrahydrofuran), 3 (8), II

Transport document description (IATA) : UN 2924 Flammable liquid, corrosive, n.o.s. (SODIUM BIS(TRIMETHYLSILYL)AMIDE, 2M in

tetrahydrofuran), 3 (8), II

Transport document description (ADN) : UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (SODIUM

BIS(TRIMETHYLSILYL)AMIDE, 2M in tetrahydrofuran), 3 (8), II

Transport document description (RID) : UN 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (SODIUM BIS(TRIMETHYLSILYL)AMIDE, 2M in tetrahydrofuran), 3 (8), II

#### 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : 3 (8)
Danger labels (ADR) : 3, 8



#### **IMDG**

Transport hazard class(es) (IMDG) : 3 (8)
Danger labels (IMDG) : 3, 8



#### IATA

Transport hazard class(es) (IATA) : 3 (8) Hazard labels (IATA) : 3, 8



#### ADN

Transport hazard class(es) (ADN) : 3 (8)
Danger labels (ADN) : 3, 8



#### **RID**

Transport hazard class(es) (RID) : 3 (8)
Danger labels (RID) : 3, 8

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#### **Packing group**

: 11 Packing group (ADR) Packing group (IMDG) : 11 Packing group (IATA) : II : II Packing group (ADN) Packing group (RID) : 11

#### 14.5. **Environmental hazards**

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

#### 14.6. Special precautions for user

#### - Overland transport

: FC Classification code (ADR) Special provisions (ADR) : 274 Limited quantities (ADR) : 11 Excepted quantities (ADR) : E2

: P001, IBC02 Packing instructions (ADR) Mixed packing provisions (ADR) : MP19 : T11

Portable tank and bulk container instructions

(ADR)

Portable tank and bulk container special : TP2, TP27

provisions (ADR)

: L4BH Tank code (ADR) Vehicle for tank carriage : FL 2 Transport category (ADR) Special provisions for carriage - Operation S2, S20

(ADR)

338 Hazard identification number (Kemler No.)

Orange plates

338 2924

Tunnel restriction code (ADR) : D/E

#### - Transport by sea

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T11 Tank special provisions (IMDG) : TP2, TP27 EmS-No. (Fire) : F-E EmS-No. (Spillage) : S-C : B Stowage category (IMDG) Stowage and handling (IMDG) : SW2

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

#### - Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y340 PCA limited quantity max net quantity (IATA) : 0.5L PCA packing instructions (IATA) : 352

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PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 363
CAO max net quantity (IATA) : 5L
Special provisions (IATA) : A3
ERG code (IATA) : 3CH

#### - Inland waterway transport

Classification code (ADN) : FC
Special provisions (ADN) : 274
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T

Equipment required (ADN) : PP, EP, EX, A

Ventilation (ADN) : VE01 Number of blue cones/lights (ADN) : 1

#### - Rail transport

Classification code (RID) : FC
Special provisions (RID) : 274
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions : T11

(RID)
Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : L4BH
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE7
Hazard identification number (RID) : 338

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

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

: TP2, TP27

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to 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.

Contains no REACH Annex XIV substances

% Volatiles : > 75 %

#### 15.1.2. National regulations

#### Germany

Reference to AwSV : Water hazard class (WGK) 2, Significantly hazardous to water (Classification according to

AwSV, Annex 1)

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Immission Control Act - 12.BImSchV

Netherlands

SZW-lijst van kankerverwekkende stoffen : Tetrahydrofuran is listed

SZW-lijst van mutagene stoffen : None of the components are listed

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NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

: None of the components are listed

Denmark

Classification remarks

: Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the

product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

5.2. Chemical safety assessment

No additional information available

#### **SECTION 16: Other information**

#### Abbreviations and acronyms:

Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information

: Prepared by safety and environmental affairs.

#### Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Carc. 2	Carcinogenicity, Category 2	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
Flam. Sol. 2	Flammable solids, Category 2	
Skin Corr. 1B	Skin corrosion/irritation, Category 1B	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H225	Highly flammable liquid and vapour.	
H228	Flammable solid.	
H302	Harmful if swallowed.	
H311	Toxic in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H351	Suspected of causing cancer.	
EUH019	May form explosive peroxides.	

#### SDS EU (REACH Annex II) - Custom

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