

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 07.01.2015 Revision date: 06.12.2023 Version: 2.2

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

1.1. Product identifier

Product form : Substance

Substance name : BIS(DIMETHYLAMINO)DIMETHYLSILANE

 EC-No.
 : 223-200-1

 CAS-No.
 : 3768-58-9

 Product code
 : SIB1072.0

 Formula
 : C6H18N2Si

Synonyms : DIMETHYLBIS(DIMETHYLAMINO)SILANE; HEXAMETHYLSILANEDIAMINE

Product group : Trade product
Chemical family : ORGANOSILANE

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2

Acute toxicity (oral), Category 4

Skin corrosion/irritation, Category 1, Sub-Category 1B

Serious eye damage/eye irritation, Category 1

Specific target organ toxicity – Single exposure, Category 3, Respiratory

H335

tract irritation

Hazardous to the aquatic environment – Acute Hazard, Category 1 H400 Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)









GHS02

GHS05

GHS07

GHS09

Signal word (CLP)

: Danger

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

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H335 - May cause respiratory irritation.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting equipment.

P260 - Do not breathe vapours.

P264 - Wash hands thoroughly after handling.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

 Mono-constituent Substance type

: BIS(DIMETHYLAMINO)DIMETHYLSILANE Name

CAS-No. 3768-58-9 EC-No. : 223-200-1

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bis(dimethylamino)dimethylsilane	CAS-No.: 3768-58-9 EC-No.: 223-200-1	97 – 100	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. 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.

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.

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

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

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Immediately call a POISON

CENTER/doctor.

4.2. Most important symptoms and effects, both acute and delayed

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

Symptoms/effects after inhalation : May cause respiratory irritation. Symptoms/effects after skin contact : Causes (severe) skin burns. Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Harmful if swallowed. Swallowing a small quantity of this material will result in serious health

hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. Irritating fumes of diethylamine and organic acid vapors

may develop when material is exposed to water or open flame.

5.3. Advice for firefighters

Firefighting instructions : Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.

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

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

SECTION 6: Accidental release measures

6.1. 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.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

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".

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

streams.

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Use only

non-sparking tools.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. Provide good ventilation

in process area to prevent formation of vapour. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use only non-sparking tools.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

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

proof electrical equipment.

Storage conditions : Keep container tightly closed. Keep in a cool place. Store locked up.

Incompatible materials : Acids. alcohols. Moisture. Oxidizing agent. 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

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation.

8.2.2. Personal protection equipment

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.

8.2.2.1. Eye and face protection

Eye protection:

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

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Neoprene or nitrile rubber gloves

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8.2.2.3. Respiratory protection

Respiratory protection:

NIOSH-certified combination organic vapor - amine gas (brown cartridge) respirator.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour Straw. Appearance : Clear liquid. Molecular mass : 146,31 g/mol Odour : Acrid. Amine. Odour threshold : Not available Melting point : Not available Freezing point : -98 °C : 128 - 129 °C Boiling point

: Highly flammable liquid and vapour. Flammability

: Not available **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit Flash point : -3 °C Auto-ignition temperature : Not available Decomposition temperature : Not available рΗ : Not available Viscosity, kinematic : Not available Solubility : Reacts with water. Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure Not available Vapour pressure at 50°C : Not available : Not available Density Relative density : 0,81

Relative vapour density at 20°C : >1

Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Refractive index : 1,4169

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable in sealed containers stored under a dry inert atmosphere.

10.3. Possibility of hazardous reactions

Reacts with water and moisture in air, liberating dimethylamine.

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10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Acids. alcohols. Moisture. Oxidizing agent. Water:

10.6. Hazardous decomposition products

Organic acid vapors. Dimethylamine.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Causes severe skin burns.
Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

Bis(dimethylamino)dimethylsilane (3768-58-9)	hylamino)dimethylsilane (3768-58-9)		
NOEL (additional information)	No Observable Effect Level (Rat(female), Oral, 90 h): 1000 mg/kg No Observable Effect Level (Rat(female), Oral, 28 h): 1000 mg/kg No Observable Effect Level (Rat(males), Oral, 28 h): 1000 mg/kg No Observable Effect Level (Rat(males), Oral, 90 h): 1000 mg/kg		
STOT-single exposure	May cause respiratory irritation.		

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

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term : Very toxic to aquatic life.

(acute)

Hazardous to the aquatic environment, long-term : Toxic to aquatic life with long lasting effects.

(chronic)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

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12.6. Endocrine disrupting properties

No additional information available

12.7. 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..

Handle empty containers with care because residual vapours are flammable.Avoid release to the environment.

Ecology - waste materials

Additional information

SECTION 14: Transport information

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

14.1. UN number or ID n				<u></u>
	umber			
UN 2733	UN 2733	UN 2733	UN 2733	UN 2733
4.2. UN proper shippin	g name			
AMINES, FLAMMABLE, CORROSIVE, N.O.S.	AMINES, FLAMMABLE, CORROSIVE, N.O.S.	Amines, flammable, corrosive, n.o.s.	AMINES, FLAMMABLE, CORROSIVE, N.O.S.	AMINES, FLAMMABLE, CORROSIVE, N.O.S.
ransport document descr	iption			
UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S. (BIS(DIMETHYLAMINO)DI METHYLSILANE), 3 (8), II, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S. (BIS(DIMETHYLAMINO)DI METHYLSILANE), 3 (8), II, MARINE POLLUTANT/ENVIRONME NTALLY HAZARDOUS	UN 2733 Amines, flammable, corrosive, n.o.s. (BIS(DIMETHYLAMINO)DI METHYLSILANE), 3 (8), II, ENVIRONMENTALLY HAZARDOUS	UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S. (BIS(DIMETHYLAMINO)DI METHYLSILANE), 3 (8), II, ENVIRONMENTALLY HAZARDOUS	UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S. (BIS(DIMETHYLAMINO)DI METHYLSILANE), 3 (8), II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard o	.3. Transport hazard class(es)			
3 (8)	3 (8)	3 (8)	3 (8)	3 (8)
8	3 8	8	3 8 8	33 8
14.4. Packing group				
II	II	II	II	II
4.5. Environmental haz	zards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes

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14.6. Special precautions for user

Overland transport

Classification code (ADR) : FC
Special provisions (ADR) : 274, 544
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T11
Portable tank and bulk container special provisions : TP1, TP27

(ADR)

Tank code (ADR) : L4BH
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2, S20
Hazard identification number (Kemler No.) : 338

Orange plates : 338

338 2733

Tunnel restriction code (ADR) : D/E

Transport by sea

Special provisions (IMDG) : 274 Limited quantities (IMDG) : 1 L Excepted quantities (IMDG) : E2 : P001 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T11 Tank special provisions (IMDG) TP1, TP27 EmS-No. (Fire) : F-E S-C EmS-No. (Spillage) Stowage category (IMDG) В Stowage and handling (IMDG) : SW2

Segregation (IMDG) : SGG18, SG35

Properties and observations (IMDG)

: Colourless to yellowish liquids with an unpleasant odour. Some are very volatile. Miscible with water. Corrosive to most metals, especially to copper and its alloys. When involved in a fire, evolve toxic gases. Reacts violently with acids. Harmful by inhalation. Cause 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 PCA max net quantity (IATA) 1L CAO packing instructions (IATA) 363 CAO max net quantity (IATA) 5L A3, A803 Special provisions (IATA) ERG code (IATA) 3C

Inland waterway transport

Classification code (ADN) : FC
Special provisions (ADN) : 274, 544
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

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Rail transport

Classification code (RID) : FC

Special provisions (RID) : 274, 544

Limited quantities (RID) : 1L

Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T11
Portable tank and bulk container special provisions : TP1, TP27

(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. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (RE	EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description	
3(a)	BIS(DIMETHYLAMINO)DI METHYLSILANE; Bis(dimethylamino)dimeth ylsilane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	
3(b)	BIS(DIMETHYLAMINO)DI METHYLSILANE; Bis(dimethylamino)dimeth ylsilane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	
3(c)	BIS(DIMETHYLAMINO)DI METHYLSILANE; Bis(dimethylamino)dimeth ylsilane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	
40.	BIS(DIMETHYLAMINO)DI METHYLSILANE; Bis(dimethylamino)dimeth ylsilane	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

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Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. 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. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H335	May cause respiratory irritation.	
H400	Very toxic to aquatic life.	
H411	Toxic to aquatic life with long lasting effects.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

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