

## SAFETY DATA SHEET

### Borane-Dimethyl Sulfide Complex, 2 M in Toluene

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking
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Product name Borane-Dimethyl Sulfide Complex, 2 M in Toluen	Ifide Complex. 2 M in Toluene
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**CAS number** 13292-87-0

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

Identified uses Research and development.

Uses advised against Not suitable for human consumption or veterinary purposes.

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

Supplier

Molekula Ltd.
Lingfield Way,
Darlington,
DL1 4XX,
United Kingdom
+44 (0) 3302000333
info@molekula.com

#### 1.4. Emergency telephone number

+44 (0) 7769276927

#### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture		
Classification (SI 2019 No. 720)		
Physical hazards	Flam. Liq. 2 - H225 Water-react. 1 - H260	
Health hazards	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Repr. 2 - H361 STOT SE 3 - H336 STOT RE 2 - H373	
Environmental hazards	Aquatic Chronic 3 - H412	
2.2. Label elements		
Hazard pictograms		

Signal word

Danger

Hazard statements	<ul> <li>H225 Highly flammable liquid and vapour.</li> <li>H260 In contact with water releases flammable gases which may ignite spontaneously.</li> <li>H302+H312 Harmful if swallowed or in contact with skin.</li> <li>H315 Causes skin irritation.</li> <li>H318 Causes serious eye damage.</li> <li>H361 Suspected of damaging fertility or the unborn child.</li> <li>H336 May cause drowsiness or dizziness.</li> <li>H373 May cause damage to organs through prolonged or repeated exposure.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	<ul> <li>P201 Obtain special instructions before use.</li> <li>P202 Do not handle until all safety precautions have been read and understood.</li> <li>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P223 Do not allow contact with water.</li> <li>P231+P232 Handle and store contents under inert gas. Protect from moisture.</li> <li>P240 Ground and bond container and receiving equipment.</li> <li>P241 Use explosion-proof electrical equipment.</li> <li>P242 Use non-sparking tools.</li> <li>P243 Take action to prevent static discharges.</li> <li>P260 Do not breathe vapour/ spray.</li> <li>P264 Wash contaminated skin thoroughly after handling.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P273 Avoid release to the environment.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</li> <li>P302+P335+P334 IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.</li> <li>P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.</li> <li>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.</li> <li>Rinse skin with water or shower.</li> <li>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P308+P313 IF exposed or concerned: Get medical advice/ attention.</li> <li>P310 Immediately call a POISON CENTER/ doctor.</li> <li>P314 Get medical advice/ attention if you feel unwell.</li> <li>P330 Rinse mouth.</li> <li>P332 P331 IF skin irritation occurs: Get medical advice/ attention.</li> <li>P342+P343 Fava Fava Fava Fava Fava Fava Fava Fav</li></ul>
Supplemental label information	EUH014 Reacts violently with water.
Contains	toluene, Borane-dimethyl sulfide complex

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

toluene		75-90%
CAS number: 108-88-3	EC number: 203-625-9	
Classification		
Flam. Liq. 2 - H225		
Skin Irrit. 2 - H315		
Repr. 2 - H361d		
STOT SE 3 - H336		
STOT RE 2 - H373		
Asp. Tox. 1 - H304		
Aquatic Chronic 3 - H412		
Borane-dimethyl sulfide complex		10-25%
Borane-dimethyl sulfide complex CAS number: 13292-87-0	EC number: 236-313-6	10-25%
CAS number: 13292-87-0	EC number: 236-313-6	10-25%
CAS number: 13292-87-0 Classification	EC number: 236-313-6	10-25%
CAS number: 13292-87-0	EC number: 236-313-6	10-25%
CAS number: 13292-87-0 Classification Flam. Liq. 2 - H225	EC number: 236-313-6	10-25%
CAS number: 13292-87-0 Classification Flam. Liq. 2 - H225 Water-react. 1 - H260	EC number: 236-313-6	10-25%
CAS number: 13292-87-0 Classification Flam. Liq. 2 - H225 Water-react. 1 - H260 Acute Tox. 3 - H301	EC number: 236-313-6	10-25%
CAS number: 13292-87-0 Classification Flam. Liq. 2 - H225 Water-react. 1 - H260 Acute Tox. 3 - H301 Acute Tox. 3 - H311	EC number: 236-313-6	10-25%
CAS number: 13292-87-0 Classification Flam. Liq. 2 - H225 Water-react. 1 - H260 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Skin Irrit. 2 - H315	EC number: 236-313-6	10-25%

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

### SECTION 4: First aid measures

4.1. Description of first aid measures		
General information	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.	
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.	
Ingestion	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Keep affected person under observation. Get medical attention if symptoms are severe or persist.	
Skin contact	It is important to remove the substance from the skin immediately. Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention.	
Eye contact	Rinse immediately with plenty of water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.	
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.	
4.2. Most important sympto	ms and effects, both acute and delaved	

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.
Ingestion	May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.
Skin contact	Redness. Irritating to skin.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

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

Notes for the doctor	Treat symptomatically.	
SECTION 5: Firefighting meas	sures	
5.1. Extinguishing media		
Suitable extinguishing media	The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Use fire-extinguishing media suitable for the surrounding fire.	
Unsuitable extinguishing media	Do not use water, if avoidable.	
5.2. Special hazards arising fr	om the substance or mixture	
Specific hazards	Reacts with water. Containers can burst violently or explode when heated, due to excessive pressure build-up. Flammable liquid and vapour. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. Fire-water run-off in sewers may create fire or explosion hazard. This product is toxic.	
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.	
5.3. Advice for firefighters		
Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.	
Special protective equipment for firefighters	Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.	
SECTION 6: Accidental release	e measures	

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

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be
	taken without appropriate training or involving any personal risk. Do not touch or walk into
	spilled material. Evacuate area. Provide adequate ventilation. No smoking, sparks, flames or
	other sources of ignition near spillage. Promptly remove any clothing that becomes
	contaminated. Avoid inhalation of vapours and spray/mists. Use suitable respiratory protection
	if ventilation is inadequate. Avoid contact with skin and eyes.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. Risk of explosion

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

Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Provide adequate ventilation. Absorb small quantities with paper towels and evaporate in a safe place. Once evaporation is complete, place paper in a suitable waste disposal container and seal securely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. The contaminated absorbent may pose the same hazard as the spilled material. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.	
Reference to other sections	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.	
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Suspected of damaging fertility. Suspected of damaging the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and	

understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on generalWash promptly if skin becomes contaminated. Take off contaminated clothing. Washoccupational hygienecontaminated clothing before reuse.

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

Storage precautions	Store away from incompatible materials (see Section 10). Store locked up. Keep away from oxidising materials, heat and flames. Avoid contact with water. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Store at temperatures between 2°C/35.6°F and 8°C/46.4°F. Handle and store under inert gas
Storage class	Water-reactive storage.
7.3. Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
SECTION 8: Exposure control	ols/Personal protection
8.1 Control parameters	

8.1. Control parameters

### Occupational exposure limits

#### toluene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m<sup>3</sup> Sk

WEL = Workplace Exposure Limit. Sk = Can be absorbed through the skin.

STEL:

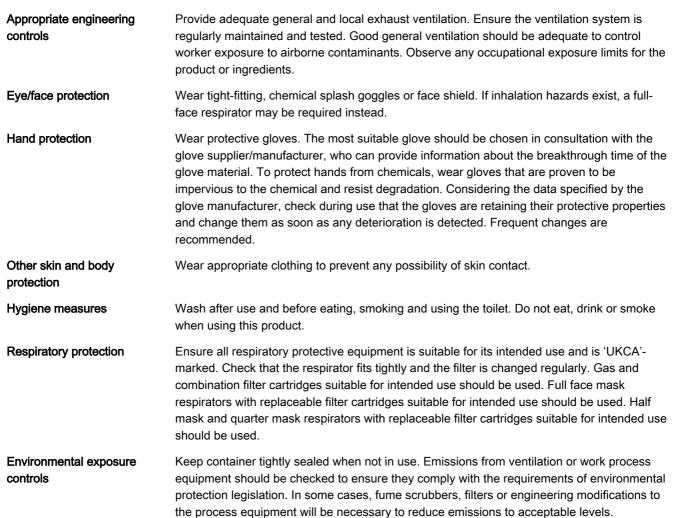
TWA:

#### 8.2. Exposure controls

Protective equipment







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

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Stench.
Odour threshold	No information available.

рН	No information available.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	7°C/44.6°F
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.855
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
9.2. Other information	
Molecular weight	75.97
SECTION 10: Stability and rea	activity
10.1. Reactivity	
Reactivity	Forms explosive mixtures with air on intense heating.
Reactivity 10.2. Chemical stability	Forms explosive mixtures with air on intense heating.
-	Forms explosive mixtures with air on intense heating. Stable under the prescribed storage conditions. Sensitive to Moisture
10.2. Chemical stability	Stable under the prescribed storage conditions. Sensitive to Moisture
10.2. Chemical stability Stability	Stable under the prescribed storage conditions. Sensitive to Moisture
10.2. Chemical stability Stability 10.3. Possibility of hazardous Possibility of hazardous	Stable under the prescribed storage conditions. Sensitive to Moisture <u>reactions</u> Reacts strongly with water. The following materials may react strongly with the product:
10.2. Chemical stability Stability 10.3. Possibility of hazardous Possibility of hazardous reactions	Stable under the prescribed storage conditions. Sensitive to Moisture <u>reactions</u> Reacts strongly with water. The following materials may react strongly with the product:
<ul> <li><u>10.2. Chemical stability</u></li> <li>Stability</li> <li><u>10.3. Possibility of hazardous</u></li> <li>Possibility of hazardous reactions</li> <li><u>10.4. Conditions to avoid</u></li> </ul>	Stable under the prescribed storage conditions. Sensitive to Moisture <u>reactions</u> Reacts strongly with water. The following materials may react strongly with the product: Oxidising agents. Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks
<u>10.2. Chemical stability</u> Stability <u>10.3. Possibility of hazardous</u> Possibility of hazardous reactions <u>10.4. Conditions to avoid</u> Conditions to avoid	Stable under the prescribed storage conditions. Sensitive to Moisture <u>reactions</u> Reacts strongly with water. The following materials may react strongly with the product: Oxidising agents. Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks
10.2. Chemical stabilityStability10.3. Possibility of hazardousPossibility of hazardousreactions10.4. Conditions to avoidConditions to avoid10.5. Incompatible materials	Stable under the prescribed storage conditions. Sensitive to Moisture reactions Reacts strongly with water. The following materials may react strongly with the product: Oxidising agents. Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks must be prevented. Water. Oxidising materials. Acids - oxidising.
10.2. Chemical stabilityStabilityStability10.3. Possibility of hazardousPossibility of hazardousreactions10.4. Conditions to avoidConditions to avoid10.5. Incompatible materialsMaterials to avoid	Stable under the prescribed storage conditions. Sensitive to Moisture reactions Reacts strongly with water. The following materials may react strongly with the product: Oxidising agents. Avoid heat, flames and other sources of ignition. Containers can burst violently or explode when heated, due to excessive pressure build-up. Static electricity and formation of sparks must be prevented. Water. Oxidising materials. Acids - oxidising.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

A cuto toxicity and	
<u>Acute toxicity - oral</u> Summary	Harmful if swallowed.
ATE oral (mg/kg)	555.56
Acute toxicity - dermal	
Summary	Harmful in contact with skin.
ATE dermal (mg/kg)	1,666.67
Acute toxicity - inhalation Summary	Based on available data the classification criteria are not met.
Skin corrosion/irritation Summary	Causes skin irritation.
Serious eye damage/irritation Summary	Causes serious eye damage.
Respiratory sensitisation Summary	Based on available data the classification criteria are not met.
Skin sensitisation Summary	Based on available data the classification criteria are not met.
Germ cell mutagenicity Summary	Based on available data the classification criteria are not met.
Carcinogenicity Summary	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity	
Summary	Suspected of damaging the unborn child. Suspected of damaging fertility.
Specific target organ toxicity -	single exposure
Summary	May cause drowsiness or dizziness.
Target organs	Central nervous system
Specific target organ toxicity -	repeated exposure
Summary	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard Summary	Based on available data the classification criteria are not met.
General information	Avoid contact during pregnancy/while nursing. May damage fertility. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.
Ingestion	May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.
Skin contact	Redness. Irritating to skin.
Eye contact	Causes serious eye damage. Symptoms following overexposure may include the following: Pain. Profuse watering of the eyes. Redness.

Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	Central nervous system
SECTION 12: Ecological infor	mation
12.1. Toxicity	
Acute aquatic toxicity Summary	Based on available data the classification criteria are not met.
Chronic aquatic toxicity	
Summary	Harmful to aquatic life with long lasting effects.
12.2. Persistence and degrad	lability
Persistence and degradability	Reacts with water.
12.3. Bioaccumulative potenti	
Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	No information available.
12.4. Mobility in soil	
Mobility	No data available.
12.5. Results of PBT and vPv	B assessment
12.6. Other adverse effects	
Other adverse effects	None known.
SECTION 13: Disposal consid	derations
13.1. Waste treatment method	
General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe
	way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
Disposal methods	be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product
Disposal methods SECTION 14: Transport inform	<ul> <li>be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.</li> <li>Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.</li> </ul>
	<ul> <li>be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.</li> <li>Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible.</li> </ul>
SECTION 14: Transport inform	be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. Mation
SECTION 14: Transport inform	be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. Mation
SECTION 14: Transport inform General <u>14.1. UN number</u>	be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. <b>mation</b> For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.
SECTION 14: Transport inform General <u>14.1. UN number</u> UN No. (ADR/RID)	be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. <b>mation</b> Sor limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.
SECTION 14: Transport inform General <u>14.1. UN number</u> UN No. (ADR/RID) UN No. (IMDG)	be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Incineration or landfill should only be considered when recycling is not feasible. mation For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

Proper shipping name (ADR/RID)	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Borane- Dimethyl Sulfide Complex, 2 M in Toluene)
Proper shipping name (IMDG)	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Borane- Dimethyl Sulfide Complex, 2 M in Toluene)
Proper shipping name (ICAO)	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Borane- Dimethyl Sulfide Complex, 2 M in Toluene)
Proper shipping name (ADN)	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Borane- Dimethyl Sulfide Complex, 2 M in Toluene)

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

ADR/RID class	4.3
ADR/RID subsidiary risk	3
ADR/RID classification code	WF1
ADR/RID label	4.3
IMDG class	4.3
IMDG subsidiary risk	3
ICAO class/division	4.3
ICAO subsidiary risk	3
ADN class	4.3
ADN subsidiary risk	3

#### **Transport labels**



14.4. Packing group

ADR/RID packing group	I
IMDG packing group	I
ICAO packing group	I
ADN packing group	I

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

#### 14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS	F-G, S-N
ADR transport category	0
Emergency Action Code	4W
Hazard Identification Number (ADR/RID)	X323

#### Tunnel restriction code (B/E)

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

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

#### **SECTION 15: Regulatory information**

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

National regulations	Health and Safety at Work etc. Act 1974 (as amended).
	The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment
	Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
	EH40/2005 Workplace exposure limits.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### Inventories

#### **EU - EINECS/ELINCS**

None of the ingredients are listed or exempt.

#### SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<ul> <li>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</li> <li>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</li> <li>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</li> <li>IATA: International Air Transport Association.</li> <li>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</li> <li>IMDG: International Maritime Dangerous Goods.</li> <li>CAS: Chemical Abstracts Service.</li> <li>ATE: Acute Toxicity Estimate.</li> <li>LC50: Lethal Concentration to 50 % of a test population.</li> <li>LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).</li> <li>EC<sub>50</sub>: 50% of maximal Effective Concentration.</li> <li>PBT: Persistent, Bioaccumulative and Toxic substance.</li> <li>vPvB: Very Persistent and Very Bioaccumulative.</li> </ul>
Classification abbreviations and acronyms	Flam. Liq. = Flammable liquid Water-react. = Substance or mixture which in contact with water emits flammable gas Acute Tox. = Acute toxicity Eye Dam. = Serious eye damage Repr. = Reproductive toxicity Skin Irrit. = Skin irritation STOT RE = Specific target organ toxicity-repeated exposure STOT SE = Specific target organ toxicity-single exposure Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Classification procedures according to SI 2019 No. 720	Acute Tox. 4 - H312: Acute Tox. 4 - H302: Eye Dam. 1 - H318: STOT RE 2 - H373: STOT SE 3 - H336: Skin Irrit. 2 - H315: Repr. 2 - H361: : Calculation method. Aquatic Chronic 3 - H412: : Calculation method. Flam. Liq. 2 - H225: Water-react. 1 - H260: : Expert judgement.
Training advice	Only trained personnel should use this material.
Revision date	25/04/2023

Revision	1
SDS number	2248
Hazard statements in full	<ul> <li>H225 Highly flammable liquid and vapour.</li> <li>H260 In contact with water releases flammable gases which may ignite spontaneously.</li> <li>H301 Toxic if swallowed.</li> <li>H302 Harmful if swallowed.</li> <li>H304 May be fatal if swallowed and enters airways.</li> <li>H311 Toxic in contact with skin.</li> <li>H312 Harmful in contact with skin.</li> <li>H315 Causes skin irritation.</li> <li>H318 Causes serious eye damage.</li> <li>H336 May cause drowsiness or dizziness.</li> <li>H361 Suspected of damaging fertility or the unborn child.</li> <li>H373 May cause damage to organs through prolonged or repeated exposure.</li> <li>H412 Harmful to aquatic life with long lasting effects.</li> </ul>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.