

according to Regulation (EC) No 1907/2006

TBI CeraProtect (392P000070, 392P000083)

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

Even after use and until complete evaporation of the flammable components, there is still a danger of an explosive steam-air mixture forming.

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	GHS Classification	
115-10-6	Dimethyl ether	75 - < 80 %
	204-065-8	
	01-2119472128-37	
	Flam. Gas 1, Liquefied gas; H220 H280	
67-64-1	Acetone	12.5 - < 15 %
	200-662-2	
	01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
109-87-5	Dimethoxymethane	0.5 - < 1 %
	203-714-2	
	01-2119664781-31	
	Flam. Liq. 2; H225	

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

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

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5.1. Extinguishing media**Suitable extinguishing media**Carbon dioxide (CO₂), Foam, Extinguishing powder.**Unsuitable extinguishing media**

Water.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Further information on handling

Heating causes rise in pressure with risk of bursting.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Lubricants, greases, release products

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SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
109-87-5	Dimethoxymethane	1000	3160		TWA (8 h)	WEL
		1250	3950		STEL (15 min)	WEL
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
115-10-6	Dimethyl ether			
Consumer DNEL, long-term		inhalation	systemic	471 mg/m ³
Worker DNEL, long-term		inhalation	systemic	1894 mg/m ³
67-64-1	Acetone			
Worker DNEL, long-term		inhalation	systemic	1210 mg/m ³
Worker DNEL, acute		inhalation	local	2420 mg/m ³
Worker DNEL, long-term		dermal	systemic	186 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	200 mg/m ³
Consumer DNEL, long-term		dermal	systemic	62 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	62 mg/kg bw/day
109-87-5	Dimethoxymethane			
Worker DNEL, long-term		inhalation	systemic	126,6 mg/m ³
Worker DNEL, long-term		dermal	systemic	17,9 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	31,5 mg/m ³
Consumer DNEL, long-term		dermal	systemic	18,1 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	18,1 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
115-10-6	Dimethyl ether	
Freshwater		0,155 mg/l
Freshwater (intermittent releases)		1,549 mg/l
Marine water		0,016 mg/l
Freshwater sediment		0,681 mg/kg
Marine sediment		0,069 mg/kg
Micro-organisms in sewage treatment plants (STP)		160 mg/l
Soil		0,045 mg/kg
67-64-1	Acetone	
Freshwater		10,6 mg/l
Marine water		1,06 mg/l
Freshwater sediment		30,4 mg/kg
Marine sediment		3,04 mg/kg
Soil		29,5 mg/kg
Freshwater (intermittent releases)		21 mg/l
Micro-organisms in sewage treatment plants (STP)		100 mg/l
109-87-5	Dimethoxymethane	
Freshwater		14,577 mg/l
Marine water		1,477 mg/l
Freshwater sediment		13,135 mg/kg
Micro-organisms in sewage treatment plants (STP)		10000 mg/l
Soil		4,654 mg/kg

8.2. Exposure controls
Appropriate engineering controls

Do not breathe gas/fumes/vapour/spray. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection. Suitable eye protection: goggles. DIN EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. EN ISO 374

Suitable material: Butyl caoutchouc (butyl rubber)

Thickness of the glove material: 0,6 mm

Breakthrough time (maximum wearing time): > 480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear anti-static footwear and clothing

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Respiratory protection

In case of inadequate ventilation wear respiratory protection. Suitable respiratory protection apparatus:
Combination filtering device (EN 14387) A-P2

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state: Liquid
 Colour: white
 Odour: like: Solvent

Test method

pH-Value: not applicable

Changes in the physical state

Melting point: not determined
 Initial boiling point and boiling range: < -20 °C
 Flash point: < -20 °C

Flammability

Solid: not applicable
 Gas: not applicable

Explosive properties

Heating may cause an explosion. In use may form flammable/explosive vapour-air mixture.

Lower explosion limits: 2,15 vol. %
 Upper explosion limits: 26,2 vol. %
 Ignition temperature: 226 °C

Auto-ignition temperature

Solid: not applicable
 Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidising.

Vapour pressure: not determined

Density (at 20 °C): 0,696 g/cm³ calculated.

Water solubility: partially miscible
 (at 20 °C)

Solubility in other solvents

not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity
10.1. Reactivity

Extremely flammable aerosol.

10.2. Chemical stability

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The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
115-10-6	Dimethyl ether					
	inhalation (4 h) gas	LC50 ppm	164000	Rat	Study report (1979)	Ten male rats were administered the test
67-64-1	Acetone					
	oral	LD50 mg/kg	5800	Rat	J Toxicol Environ Health 15: 609-621 (19)	Undiluted acetone applied to female rats
	dermal	LD50 mg/kg	> 7426	Rabbit	Toxicol Appl Pharmacol 7: 559-565. (1965)	other: Code of federal regulations: 21 C
	inhalation (4 h) vapour	LC50	76 mg/l	Rat		
109-87-5	Dimethoxymethane					
	oral	LD50 mg/kg	6423	Rat		
	dermal	LD50 mg/kg	> 5000	Rabbit	Study report (1989)	OECD Guideline 402

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness. (Acetone)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

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SECTION 12: Ecological information
12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
115-10-6	Dimethyl ether					
	Acute fish toxicity	LC50 mg/l	> 4100	96 h	Poecilia reticulata	Study report (1988) other: NEN 6504 Water - Determination of
	Acute algae toxicity	ErC50 mg/l	154,917	96 h	green algae	Other company data (2009) other: Data generated using ECOSAR v1.00
	Acute crustacea toxicity	EC50 mg/l	> 4400	48 h	Daphnia magna	Study report (1988) other: NEN6501: Water -Determination of
67-64-1	Acetone					
	Acute fish toxicity	LC50 mg/l	8120	96 h	Pimephales promelas	Publication (1984) OECD Guideline 203
	Acute crustacea toxicity	EC50 mg/l	8800	48 h	Daphnia pulex	Publication (1978) The toxicity of acetone towards daphnids
	Algae toxicity	NOEC	430 mg/l	4 d		
	Crustacea toxicity	NOEC mg/l	2212	28 d	Daphnia magna	Arch Environm Contam Toxicol 12: 305-310 Study conducted comparable to OECD 211 w
	Acute bacteria toxicity	(61150 mg/l)		0,5 h	activated sludge of a predominantly domestic sewage	Water Res 26: 887-892 (1992) ISO 8192
109-87-5	Dimethoxymethane					
	Acute fish toxicity	LC50 mg/l	> 1000	96 h	Brachydanio rerio	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	9120	72 h	Pseudokirchneriella subcapitata	Study report (2015) other: REACH guidance on QSAR R6, May 20
	Acute crustacea toxicity	EC50 mg/l	> 1200	48 h	Daphnia magna	Study report (1991) OECD Guideline 202
	Fish toxicity	NOEC mg/l	450,281	30 d	not relevant	Study report (2012) other: REACH guidance on QSAR R6, May 20
	Algae toxicity	NOEC mg/l	145,77	30 d	algae	Study report (2012) other: REACH guidance on QSAR R6, May 20
	Crustacea toxicity	NOEC mg/l	150,5	30 d	Daphnia magna	Study report (2012) other: REACH guidance on QSAR R6, May 20

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
67-64-1	Acetone				
	Biodegradation	91%		28	
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
115-10-6	Dimethyl ether	0,07
67-64-1	Acetone	-0,23
109-87-5	Dimethoxymethane	0

BCF

CAS No	Chemical name	BCF	Species	Source
67-64-1	Acetone	3		Unpublished calculat
109-87-5	Dimethoxymethane	0,6		Handbook of Chemical

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Completely emptied packages can be recycled.

SECTION 14: Transport information
Land transport (ADR/RID)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1

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Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D

Inland waterways transport (ADN)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1



Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

Marine transport (IMDG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1



Special Provisions:	63, 190, 277, 327, 344, 381, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1



Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0

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IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Flammable gases.

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****EU regulatory information**

2010/75/EU (VOC):	94,552 % (658,082 g/l)
2004/42/EC (VOC):	94,552 % (658,082 g/l)
Information according to 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS

Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC, 2008/47/EC
Aerosol directive (75/324/EEC).

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
Water contaminating class (D):	1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 4,5,7,8,9.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

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ATE: Acute toxicity estimate
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Eye Irrit. 2; H319	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)