complying with Regulation (EC) No 1907/2006 (amended by Regulation (EU) No 830/2015)



Printing date 08.12.2017 Version number 32 Revision: 08.12.2017

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

- · 1.1 Product identifier
- · Trade name: EXTREMULTUS Spray Conditioner
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Lubricant
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Forbo Siegling GmbH

Lilienthalstr. 6/8

D-30179 Hannover

Tel. 0511/6704-0

· Information department:

Chemical Laboratory

e-mail: Claudius.Hayduk@forbo.com

· 1.4 Emergency telephone number:

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

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

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



Skin Irrit. 2 H315 Causes skin irritation.

Aguatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS02

GHS07

- · Signal word Danger
- · Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H315 Causes skin irritation.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P221 Take any precaution to avoid mixing with combustibles.

P251 Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P302+P352 IF ON SKIN: Wash with plenty of water/tvål

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

Buildup of explosive mixtures possible without sufficient ventilation.

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· 2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

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

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	butane, pure  Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane liquefied  Flam. Gas 1, H220; Press. Gas C, H280	2.5-10%
CAS: 109-66-0 EINECS: 203-692-4 Reg.nr.: 01-2119459286-30-XXXX	pentane  The penta	2.5-10%
EC number: 931-254-9 Reg.nr.: 01-2119484651-34	Kohlenwasserstoffe, C6, Isoalkane, <5% n-Hexan.  Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%
EC number: 926-605-8 Reg.nr.: 01-2119486291-36	Naphtha (petroleum), hydrotreated light, <0,1% benzene  Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	< 2.5%
CAS: 110-54-3 EINECS: 203-777-6 Reg.nr.: 01-2119480412-44-XXXX	n-hexane  Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	< 2.5%
CAS: 110-82-7 EINECS: 203-806-2 Reg.nr.: 01-2119463273-41-XXXX	cyclohexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	< 0.5%
CAS: 110-19-0 EINECS: 203-745-1	isobutyl acetate  Stam. Liq. 2, H225	< 0.5%
CAS: 123-92-2 EINECS: 204-662-3	isopentyl acetate  Splam. Liq. 3, H226	< 0.5%

· Additional information For the wording of the listed hazard phrases refer to section 16.

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

- · 4.1 Description of first aid measures
- · General information Do not leave affected persons unattended.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact Rinse with warm water.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed Dizziness

Nausea

- · Information for doctor MSDB
- · Danger Danger of impaired breathing.
- · 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

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

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

Alcohol resistant foam

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

Sand

· For safety reasons unsuitable extinguishing agents



Water.

Water with full jet.

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · Additional information Cool endangered receptacles with water spray.

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

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Keep away from ignition sources





Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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

- · 7.1 Precautions for safe handling Open and handle receptacle with care.
- · Information about protection against explosions and fires:

Do not spray on a naked flame or any incandescent material.



Keep ignition sources away - Do not smoke.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Store in a cool location.

Observe official regulations on storing packagings with pressurised containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Do not gas tight seal receptacle.

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Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

- · Storage class 2 B
- · 7.3 Specific end use(s) Storage time: 24 month

#### **SECTION 8: Exposure controls/personal protection**

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters

0.1 00	10.1 Control parameters			
· Comp	· Components with limit values that require monitoring at the workplace:			
106-97	7-8 butane, pure			
	Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)			
109-66	6-0 pentane			
WEL	Long-term value: 1800 mg/m³, 600 ppm			
110-54	4-3 n-hexane			
WEL I	Long-term value: 72 mg/m³, 20 ppm			
110-82	2-7 cyclohexane			
	Short-term value: 1050 mg/m³, 300 ppm Long-term value: 350 mg/m³, 100 ppm			
110-19	9-0 isobutyl acetate			
	Short-term value: 903 mg/m³, 187 ppm Long-term value: 724 mg/m³, 150 ppm			
123-92	2-2 isopentyl acetate			
	Short-term value: 541 mg/m³, 100 ppm Long-term value: 270 mg/m³, 50 ppm			

- · Additional information: The lists that were valid during the creation were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Do not eat, drink, smoke or sniff while working.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Natural rubber, NR

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye protection: Safety glasses
- · Body protection: Protective work clothing.

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

- · 9.1 Information on basic physical and chemical properties
- General Information
- · Appearance:

Form: Aerosol
Colour: Yellow-brown

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· Odour: · Odour threshold:	Characteristic Not determined.
· pH-value:	Not determined.
<ul> <li>Change in condition</li> <li>Melting point/freezing point:</li> <li>Initial boiling point and boiling range</li> </ul>	Not applicable, as aerosol e: -44 °C
· Flash point:	-97 °C
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	285 °C
· Decomposition temperature:	Not determined.
· Self igniting	Not determined.
· Explosive properties:	Risk of bursting at temperatures > 50°C. Damage of the container may lead to the formation of explosive mixtures of gas/vapors with air.
<ul><li>Explosion limits:</li><li>Lower:</li><li>Upper:</li><li>Oxidising properties</li></ul>	1,5 Vol % 8,5 Vol % Nicht bestimmt
· Vapour pressure at 20 °C:	2.100 hPa 2.5-4.5 bar
Density at 20 °C:     Relative density     Vapour density     Evaporation rate	0,768 g/cm <sup>3</sup> Not determined. Not determined. Not applicable.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity: dynamic: kinematic:	Not determined. Not determined.
· Solvent content: Organic solvents:	30,9 %
Solids content:	0,0 %
· 9.2 Other information	No further relevant information available.

#### **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

Stable up to melting point.

- · 10.3 Possibility of hazardous reactions Develops readily flammable gases / fumes
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: Danger of toxic pyrolysis products

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

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

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		(Contd. of page 5)		
· LD/LC50 values that are relevant for classification:				
Naphtha (petroleum), hydrotreated light, <0,1% benzene				
Oral	LD50	>5,000 mg/kg (rat)		
Dermal	LD50	>2,000 mg/kg (rabbit)		
Inhalative	LC50/4 h	>20 mg/l (rat)		
110-82-7 cyclohexane				
Oral	LD50	12,705 mg/kg (rat)		

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · 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.

#### **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity:

Naphtha (petroleum), hydrotreated light, <0,1% benzene

Sensitisation LC50/96h 2.5 mg/l (ftt)

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.



Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

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

- · 13.1 Waste treatment methods
- · Recommendation



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

16 05 04\* gases in pressure containers (including halons) containing dangerous substances

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- Uncleaned packagings:
   Recommendation: Packaging can be reused or recycled after cleaning.
   Recommended cleansing agent: Solvent naphtha

SECTION 14: Transport informati	ion
· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name · ADR · IMDG · IATA	1950 AEROSOLS AEROSOLS AEROSOLS, flammable
· 14.3 Transport hazard class(es)	
· ADR	
· Class · Label	2 5F Gases. 2.1
· IMDG, IATA	
· Class	2.1
· Label	2.1
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	nein No
<ul> <li>14.6 Special precautions for user</li> <li>Danger code (Kemler):</li> <li>EMS Number:</li> <li>Stowage Code</li> </ul> Segregation Code	Warning: Gases.  F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 litre:
· 14.7 Transport in bulk according to Anne	Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0
· Transport category	Not permitted as Excepted Quantity 2

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· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0
,	Not permitted as Excepted Quantity
· Remarks:	limited quantities AEROSOLS UN 1950
· IATA	
· Remarks:	UN-4G/Y fibreboard boxes required
	Label: Flammable Gas
	Marking: AEROSOLS, flammable UN 1950
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

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

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 57
- · National regulations
- · Technical instructions (air):

Class	Share in %
ı	0.7
III	34.7
NK	31.4

- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

- · Relevant phrases
- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H336 May cause drowsiness or dizziness.
- H361f Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- · Department issuing SDS: Chemical Laboratory
- · Contact:

C.Hayduk

Tel.-Nr. +49 511 6704 214 Fax-Nr. +49 511 6704 489 Mobil-Nr.+49 151 11741970

#### · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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 Harmonised 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 (division of the American Chemical Society)

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#### **Safety Data Sheet**

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LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

VPVB: Very Persistent and Very Bioaccumulative
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas C: Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Pages 2: Reproductive toxicity. Category 2

Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard — Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard — Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard — Category 3

· \* Data compared to the previous version altered.

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