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

1.1. Product identifier

Product form : Mixture
Trade name : FIBROLIT® - RL Rostlöser
Product code : 280.15

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 : Rust dissolver which frees the blocked parts and makes disassembly easier

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
FIBRO GmbH Geschäftsbereich Normalien
August-Läpple-Weg
P.O. Box 1120
74855 Hassmersheim - Deutschland
T +49 6266-73-0 - F +49 6266-73-237
info@fibro.de

Safety Data Sheet
info@ubsplus.de

1.4. Emergency telephone number

Emergency number : +49 761 19240
(VIZ Freiburg, 24 h, German & English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aerosol 1	H222;H229
Skin Irrit. 2	H315
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Chronic 2	H411

Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07 GHS08 GHS09

Signal word (CLP) : Danger

Hazardous ingredients : Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).]

Hazard statements (CLP) : H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P102 - Keep out of reach of children.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 - Do not pierce or burn, even after use.
P260 - Do not breathe spray.
P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER, a doctor.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).]	(CAS-No.) 8008-20-6 (EC-No.) 232-366-4 (EC Index-No.) 649-404-00-4 (REACH-no) 01-2119485517-27	20-50	Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
butane	(CAS-No.) 106-97-8 (EC-No.) 203-448-7 (EC Index-No.) 601-004-00-0 (REACH-no) 01-2119474691-32	10-40	Flam. Gas 1, H220 Press. Gas
propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5 (REACH-no) 01-2119486944-21	10-40	Flam. Gas 1, H220 Press. Gas

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Move the affected person away from the contaminated area. Fresh air, rest. Prevent cooling by covering the victim (no warming up). If unconscious place in recovery position and seek medical advice. Do not give an unconscious person anything to drink. Remove soiled clothing promptly.

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 : Immediately remove contaminated clothing or footwear. Rinse and then wash skin thoroughly with water and soap. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Wash with plenty of water (during 20 minutes minimum) with eyes wide open after taking off soft contact lenses and immediately take medical advice.

First-aid measures after ingestion : Rinse mouth with water, do not induce vomiting, call a doctor.

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

Symptoms/effects after inhalation : Dizziness.

Symptoms/effects after skin contact : Irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after ingestion : Aspiration hazard.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water. Carbon dioxide. Foam.

Unsuitable extinguishing media : dry chemical powder.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : Pressurised container: May burst if heated. May form flammable/explosive vapour-air mixture. Cool down the containers exposed to heat with a water spray.

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Do not allow run-off from fire fighting to enter drains or water courses. Do not contaminate ground and surface water.

Protection during firefighting : Extra personal protection: complete protective clothing including self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate the danger area. Keep public away from danger area. Mark the danger area. Remove ignition sources. Prevent the product from entering cellars, basements or pits.

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Wear personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment : Dike and contain spill. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

Fire fighting measures. SECTION 5. Personal protective equipment. SECTION 8. Disposal considerations. SECTION 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Read label before use. Ensure good ventilation of the work station. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.

Hygiene measures : Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with soap and water before leaving work. Apply emollient cream.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place.

Heat and ignition sources : Keep away from sources of ignition - No smoking.

Information on mixed storage : Keep away from food, drink and animal feeding stuffs.

Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

butane (106-97-8)		
United Kingdom	Local name	Butane
United Kingdom	WEL TWA (mg/m³)	1450 mg/m³
United Kingdom	WEL TWA (ppm)	600 ppm
United Kingdom	WEL STEL (mg/m³)	1810 mg/m³
United Kingdom	WEL STEL (ppm)	750 ppm
United Kingdom	Remark (WEL)	Carc, (only applies if Butane contains more than 0.1% of buta-1,3-diene)

Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).] (8008-20-6)
DNEL/DMEL (General population)

Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).] (8008-20-6)	
Long-term - systemic effects,oral	19 mg/kg bw/d

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Wear proper protective equipment. Gloves. Protective goggles. Insufficient ventilation: wear respiratory protection.

Hand protection : Chemically resistant protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. . Penetration time of glove material >480 min (EN 374). Material : Nitrile rubber (0,40 mm)

Eye protection : Wear closed safety glasses. (EN 166)

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Breathing apparatus with filter. Filter type: AX. Appropriate self-contained breathing apparatus may be required

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Aerosol.
Colour	: Grey
Odour	: Mineral oil
Odour threshold	: Not determined
pH	: Not determined
Relative evaporation rate (butylacetate=1)	: Not determined
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: ≈ -42 °C
Flash point	: ≈ -80 °C
Auto-ignition temperature	: ≈ 420 °C
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapour pressure	: ca. 48 hPa (T = 20°C)
Vapour pressure at 50 °C	: 0
Relative vapour density at 20 °C	: Not determined
Relative density	: Not determined
Density	: ≈ 0.8 g/cm³ (20 °C)
Solubility	: Water: Insoluble
Log Pow	: No data available
Viscosity, kinematic	: Not specifically applicable
Viscosity, dynamic	: Not specifically applicable
Explosive properties	: Pressurised container: May burst if heated. Explosive vapour/air mixtures may be formed.
Oxidising properties	: Not known.
Explosive limits	: 1.5 g/m³ 10 g/m³

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Pressurised container: May burst if heated.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (No data available)

Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).] (8008-20-6)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 5.28 mg/l/4h (OECD 403 method)

propane (74-98-6)	
LC50 inhalation rat (mg/l)	> 1443 mg/l (15 min)

butane (106-97-8)	
LC50 inhalation rat (mg/l)	> 1443 mg/l (15 min, Read-Across: propane)

Skin corrosion/irritation : Causes skin irritation.
Calculation method
pH: Not determined

Serious eye damage/irritation : Not classified (No data available)
pH: Not determined

Respiratory or skin sensitisation : Not classified (No data available)

Germ cell mutagenicity : Not classified (No data available)

Carcinogenicity : Not classified (No data available)

Reproductive toxicity : Not classified (No data available)

STOT-single exposure : May cause drowsiness or dizziness.
Calculation method

STOT-repeated exposure : Not classified (No data available)

Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).] (8008-20-6)	
NOAEL (oral, rat, 90 days)	750 mg/kg bw/d
NOAEL (dermal, rat/rabbit, 90 days)	495 mg/kg bodyweight/day (rat)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	1 mg/l

Aspiration hazard : May be fatal if swallowed and enters airways.
Bridging principle "Dilution"

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).] (8008-20-6)	
LC50 fish 1	2 - 5 mg/l (LL50, Oncorhynchus mykiss (Rainbow trout), OECD 203)
EC50 Daphnia 1	1.4 mg/l (EL50, OECD 202)

Kerosine (petroleum); Straight run kerosine; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C9 through C16 and boiling in the range of approximately 150°C to 290°C (320°F to 554°F).] (8008-20-6)	
NOEC chronic fish	0.098 mg/l (Calculation method: PETROTOX)
NOEC chronic crustacea	0.48 mg/l (daphnia magna, OECD 211)

12.2. Persistence and degradability

FIBROLIT® - RL Rostlöser	
Persistence and degradability	Not determined.

12.3. Bioaccumulative potential

FIBROLIT® - RL Rostlöser	
Bioaccumulative potential	Not determined.

12.4. Mobility in soil

FIBROLIT® - RL Rostlöser	
Ecology - soil	No data available.

12.5. Results of PBT and vPvB assessment

FIBROLIT® - RL Rostlöser
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : This material and its container must be disposed of in a safe way, and as per local legislation.

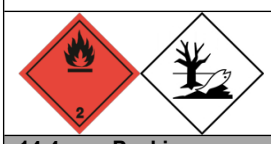
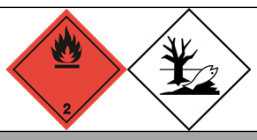
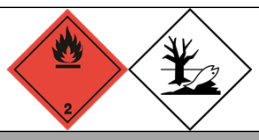
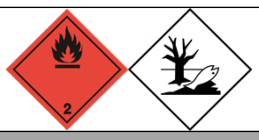
Sewage disposal recommendations : Do not allow to enter drains or water courses.

Product/Packaging disposal recommendations : Do not dispose of with domestic waste. Empty remaining contents.

Additional information : Handle uncleaned empty containers as full ones.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1950	1950	1950	1950	1950
14.2. UN proper shipping name				
AEROSOLS (BLOWING AGENT: PROPANE/BUTANE)	AEROSOLS (BLOWING AGENT: PROPANE/BUTANE)	Aerosols, flammable (BLOWING AGENT: PROPANE/BUTANE)	AEROSOLS (BLOWING AGENT: PROPANE/BUTANE)	AEROSOLS (BLOWING AGENT: PROPANE/BUTANE)
Transport document description				
UN 1950 AEROSOLS (BLOWING AGENT: PROPANE/BUTANE), 2.1, (D), ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS (BLOWING AGENT: PROPANE/BUTANE), 2.1, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1950 Aerosols, flammable (BLOWING AGENT: PROPANE/BUTANE), 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS (BLOWING AGENT: PROPANE/BUTANE), 2.1, ENVIRONMENTALLY HAZARDOUS	UN 1950 AEROSOLS (BLOWING AGENT: PROPANE/BUTANE), 2.1, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
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
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: 5F
Special provisions (ADR)	: 190, 327, 344, 625
Limited quantities (ADR)	: 1l
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207, LP02
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

- Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP02
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None

- Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

- Inland waterway transport

Classification code (ADN)	: 5F
Special provisions (ADN)	: 19, 327, 344, 625
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01, VE04
Number of blue cones/lights (ADN)	: 1

- Rail transport

Classification code (RID)	: 5F
Special provisions (RID)	: 190, 327, 344, 625
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P207, LP02
Special packing provisions (RID)	: PP87, RR6, L2
Mixed packing provisions (RID)	: MP9
Transport category (RID)	: 2

Special provisions for carriage – Packages (RID)	:	W14
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW9, CW12
Colis express (express parcels) (RID)	:	CE2
Hazard identification number (RID)	:	23

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

IBC code : 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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations : Ozone layer depleting substances: Not subject to Regulation (EC) No 1005/2009. Persistent organic pollutants (POPs): Not subject to Regulation (EC) No 850/2004. Export and import of dangerous chemicals: Not subject to Regulation (EC) No 649/2012. Control of major-accident hazards (COMAH, Seveso III): Subject to Directive 2012/18/EC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Not applicable
Mixtures

SECTION 16: Other information

Indication of changes:			
Section	**Changed item**	**Change**	**Comments**
3.2	Concentration	Modified	
3.2	REACH registration numbers	Added	
5.1	Extinguishing media	Modified	
7.1	Precautions for safe handling	Added	
8.1	DNEL	Added	
8.1	TRGS 900: Occupational Exposure Limits	Added	
9.1	Physical and chemical properties	Added	
11	Toxicological information	Added	
15	Water hazard class (WGK)	Modified	
15	Regulatory information	Modified	

Full text of H- and EUH-statements:	
Aerosol 1	Aerosol, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Gas 1	Flammable gases, Category 1
Press. Gas	Gases under pressure
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aerosol 1	H222;H229	Expert judgment
Skin Irrit. 2	H315	Calculation method
STOT SE 3	H336	Calculation method
Asp. Tox. 1	H304	Expert judgment
Aquatic Chronic 2	H411	Calculation method

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product