

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Mixture
Trade name	: FIBROLIT® - ARF-Anreißfarbe
Product code	: 280.131
Vaporizer	: Aerosol

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 : Spraying paint (spray can)

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
Eye Irrit. 2	H319
STOT SE 3	H336

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

Signal word (CLP) :

Danger

Hazardous ingredients :

propan-2-ol; isopropyl alcohol; isopropanol; butanone; ethyl methyl ketone

Hazard statements (CLP) :

H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.

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.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P260 - Do not breathe spray.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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

Comments (on top of composition) : Preparation based on : Resin, Dyestuff/pigment, Blowing agent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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
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
propan-2-ol; isopropyl alcohol; isopropanol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (EC Index-No.) 603-117-00-0 (REACH-no) 01-2119457558-25	20 - 40	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
butanone; ethyl methyl ketone	(CAS-No.) 78-93-3 (EC-No.) 201-159-0 (EC Index-No.) 606-002-00-3 (REACH-no) 01-2119457290-43	10 - 20	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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	: May cause drowsiness or dizziness.
Symptoms/effects after eye contact	: Eye irritation.

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

Assure fresh air breathing. 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. Danger of explosion.

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. Take precautionary measures against static discharge. Keep away from sources of ignition - No smoking. Danger of explosion.
- 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)

- Aerosol can.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

butane (106-97-8)		
United Kingdom	Local name	Butane
United Kingdom	WEL TWA (mg/m ³)	1450 mg/m ³
United Kingdom	WEL TWA (ppm)	600 ppm
United Kingdom	WEL STEL (mg/m ³)	1810 mg/m ³
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)
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)		
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m ³)	999 mg/m ³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1250 mg/m ³
United Kingdom	WEL STEL (ppm)	500 ppm

butanone; ethyl methyl ketone (78-93-3)		
EU	Local name	Butanone
EU	IOELV TWA (mg/m ³)	600 mg/m ³
EU	IOELV TWA (ppm)	200 ppm
EU	IOELV STEL (mg/m ³)	900 mg/m ³
EU	IOELV STEL (ppm)	300 ppm
United Kingdom	Local name	Butan-2-one
United Kingdom	WEL TWA (mg/m ³)	600 mg/m ³
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m ³)	899 mg/m ³
United Kingdom	WEL STEL (ppm)	300 ppm
United Kingdom	Remark (WEL)	Sk, BMGV

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	888 mg/kg bw/d
Long-term - systemic effects, inhalation	500 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	26 mg/kg bw/d
Long-term - systemic effects, inhalation	89 mg/m ³
Long-term - systemic effects, dermal	319 mg/kg bw/d
PNEC (Water)	
PNEC aqua (freshwater)	140.9 mg/l
PNEC aqua (marine water)	140.9 mg/l
PNEC aqua (intermittent, freshwater)	140.9 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	552 mg/kg dwt
PNEC sediment (marine water)	552 mg/kg dwt
PNEC (Soil)	
PNEC soil	28 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	2251 mg/l

butanone; ethyl methyl ketone (78-93-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1161 mg/kg bw/d
Long-term - systemic effects, inhalation	600 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	31 mg/kg bw/d
Long-term - systemic effects, inhalation	106 mg/m ³
Long-term - systemic effects, dermal	412 mg/kg bw/d
PNEC (Water)	
PNEC aqua (freshwater)	55.8 mg/l
PNEC aqua (marine water)	55.8 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	284.7 mg/kg dwt
PNEC sediment (marine water)	284.7 mg/kg dwt
PNEC (Soil)	
PNEC soil	22.5 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	1000 mg/kg
PNEC (STP)	
PNEC sewage treatment plant	709 mg/l

8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station. If handled uncovered, arrangements with local exhaust ventilation have to be used.
Personal protective equipment	: Wear proper protective equipment. Gloves. Protective goggles. Insufficient ventilation: wear respiratory protection.

Hand protection	: Recommended materials. Nitrile rubber (0,4 mm). Penetration time of glove material > 480 min (EN 374). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer
Eye protection	: Wear closed safety glasses. (EN 166)
Respiratory protection	: Not necessary with sufficient ventilation. 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	: Liquid
Appearance	: Aerosol.
Colour	: red / Blue
Odour	: alcoholic
Odour threshold	: Not determined
pH	: Not determined
Relative evaporation rate (butylacetate=1)	: Not determined
Melting point	: Not determined
Freezing point	: Not determined
Boiling point	: ≈ -40 °C
Flash point	: ≈ -80 °C
Auto-ignition temperature	: ≈ 420 °C
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapour pressure	: 48 hPa (20 °C)
Vapour pressure at 50 °C	: 236 hPa
Relative vapour density at 20 °C	: Not determined
Relative density	: Not determined
Density	: ≈ 0.8 g/cm ³
Solubility	: Water: Insoluble Organic solvent: Miscible
Log Pow	: Not determined
Viscosity, kinematic	: Not determined
Viscosity, dynamic	: 850 - 1150 mPa.s (T = 25°C, ISO 9371)
Explosive properties	: Pressurised container: May burst if heated. Explosive vapour/air mixtures may be formed.
Oxidising properties	: Not known.
Explosive limits	: 1.5 - 12 g/m ³ 1.5 g/m ³ 12 g/m ³

9.2. Other information

VOC content	: ca. 93 %
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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

alkali metals. Oxidizing agent.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information
11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

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)
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LD50 oral rat	4570 mg/kg
LD50 dermal rabbit	13400 mg/kg
LC50 inhalation rat (mg/l)	30 mg/l/4h
butanone; ethyl methyl ketone (78-93-3)	
LD50 oral rat	> 2000 mg/kg bw (Bibliographic results)
LD50 dermal rabbit	> 2000 mg/kg bw (Bibliographic results)

 Skin corrosion/irritation : Repeated exposure may cause skin dryness or cracking. (Based on available data, the classification criteria are not met)
 pH: Not determined

 Serious eye damage/irritation : Causes serious eye irritation.
 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.

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

Aspiration hazard : Not classified (No data available)

FIBROLIT® - ARF-Anreißfarbe	
Vaporizer	Aerosol

SECTION 12: Ecological information
12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l
butanone; ethyl methyl ketone (78-93-3)	
LC50, fish, leuciscus idus	> 100 mg/l (48 Hours, (Bibliographic results))
EC50, daphnia magna	> 100 mg/l (48 Hours, (Bibliographic results))
EC50, algae, desmodesmus subspicatus	> 100 mg/l (7 days, (Bibliographic results))

12.2. Persistence and degradability

FIBROLIT® - ARF-Anreißfarbe	
Persistence and degradability	Not determined.
propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Persistence and degradability	Biodegradable.

12.3. Bioaccumulative potential

FIBROLIT® - ARF-Anreißfarbe	
Log Pow	Not determined
Bioaccumulative potential	Bioaccumulation unlikely.

propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)	
Log Pow	-0.16

12.4. Mobility in soil

FIBROLIT® - ARF-Anreißfarbe	
Ecology - soil	No data available.

12.5. Results of PBT and vPvB assessment

FIBROLIT® - ARF-Anreißfarbe	
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)	UN 1950 AEROSOLS (BLOWING AGENT: PROPANE/BUTANE), 2.1	UN 1950 Aerosols, flammable (BLOWING AGENT: PROPANE/BUTANE), 2.1	UN 1950 AEROSOLS (BLOWING AGENT: PROPANE/BUTANE), 2.1	UN 1950 AEROSOLS (BLOWING AGENT: PROPANE/BUTANE), 2.1
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 : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
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)	: 11
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.
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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

VOC content : ca. 93 %

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	REACH registration numbers	Added	
5.1	Extinguishing media	Modified	
8.1	DNELs & PNECs	Added	
8.1	Biological limit values	Added	
9.1	Physical and chemical properties	Added	
15	Regulatory information	Modified	

Full text of H- and EUH-statements:

Aerosol 1	Aerosol, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas	Gases under pressure
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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	On basis of test data
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	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