

**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 : 280.23

**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 : Colour

**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](mailto:info@fibro.de)

**Safety Data Sheet**

[info@ubsplus.de](mailto: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]**

Flam. Liq. 2 H225  
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) :

H225 - Highly flammable liquid and vapour.  
H319 - Causes serious eye irritation.  
H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P241 - Use explosion-proof electrical equipment.  
P261 - Avoid breathing vapours.  
P280 - Wear eye protection, protective gloves, protective clothing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

EUH-statements :

EUH066 - Repeated exposure may cause skin dryness or cracking.

**2.3. Other hazards**

Other hazards not contributing to the classification : Vapours may form explosive mixture with air.

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, Solvent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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	40 - 60	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	20 - 40	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 (CO<sub>2</sub>), powder and foam.
- Unsuitable extinguishing media : Do not use a heavy water stream.

**5.2. Special hazards arising from the substance or mixture**

- Explosion hazard : 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)**

No additional information available

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

<b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b>		
United Kingdom	Local name	Propan-2-ol
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	999 mg/m <sup>3</sup>
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	1250 mg/m <sup>3</sup>
United Kingdom	WEL STEL (ppm)	500 ppm
<b>butanone; ethyl methyl ketone (78-93-3)</b>		
EU	Local name	Butanone
EU	IOELV TWA (mg/m <sup>3</sup> )	600 mg/m <sup>3</sup>
EU	IOELV TWA (ppm)	200 ppm
EU	IOELV STEL (mg/m <sup>3</sup> )	900 mg/m <sup>3</sup>
EU	IOELV STEL (ppm)	300 ppm
United Kingdom	Local name	Butan-2-one
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	600 mg/m <sup>3</sup>
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	899 mg/m <sup>3</sup>
United Kingdom	WEL STEL (ppm)	300 ppm
United Kingdom	Remark (WEL)	Sk, BMGV

<b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b>	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	888 mg/kg bw/d
Long-term - systemic effects, inhalation	500 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	26 mg/kg bw/d
Long-term - systemic effects, inhalation	89 mg/m <sup>3</sup>
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
<b>butanone; ethyl methyl ketone (78-93-3)</b>	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1161 mg/kg bw/d
Long-term - systemic effects, inhalation	600 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	31 mg/kg bw/d
Long-term - systemic effects, inhalation	106 mg/m <sup>3</sup>
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.
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
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	: ≈ 80 °C
Flash point	: 12 °C
Auto-ignition temperature	: ≈ 420 °C
Decomposition temperature	: Not determined
Flammability (solid, gas)	: Not applicable.
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 <sup>3</sup>
Solubility	: Soluble in : alcohols. Ketones. Organic solvents. Water: Insoluble
Log Pow	: No data available
Viscosity, kinematic	: Not determined
Viscosity, dynamic	: 850 - 1150 mPa.s (T = 25°C, ISO 9371)
Explosive properties	: Explosive vapour/air mixtures may be formed.
Oxidising properties	: Not known.
Explosive limits	: Not determined 1.5 - 12 g/m <sup>3</sup>

**9.2. Other information**

VOC content : ca. 85 %

**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

No dangerous reactions known under normal conditions of use.

**10.2. Chemical stability**

Stable under normal conditions of use.

**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)

<b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b>	
LD50 oral rat	4570 mg/kg
LD50 dermal rabbit	13400 mg/kg
LC50 inhalation rat (mg/l)	30 mg/l/4h

<b>butanone; ethyl methyl ketone (78-93-3)</b>	
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 (Based on available data, the classification criteria are not met)
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)

## SECTION 12: Ecological information

### 12.1. Toxicity

Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

<b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b>	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 100 mg/l

<b>butanone; ethyl methyl ketone (78-93-3)</b>	
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

<b>FIBROLIT® - ARF-Anreißfarbe</b>	
Persistence and degradability	Not determined.

<b>propan-2-ol; isopropyl alcohol; isopropanol (67-63-0)</b>	
Persistence and degradability	Biodegradable.

### 12.3. Bioaccumulative potential

<b>FIBROLIT® - ARF-Anreißfarbe</b>	
Bioaccumulative potential	Bioaccumulation unlikely.

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

### 12.4. Mobility in soil

<b>FIBROLIT® - ARF-Anreißfarbe</b>	
Ecology - soil	No data available.

### 12.5. Results of PBT and vPvB assessment

<b>FIBROLIT® - ARF-Anreißfarbe</b>	
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.
Additional information	: Handle uncleaned empty containers as full ones.

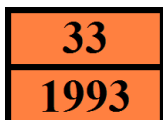
**SECTION 14: Transport information**

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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
1993	1993	1993	1993	1993
<b>14.2. UN proper shipping name</b>				
FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE))	FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE))	Flammable liquid, n.o.s. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE))	FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE))	FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE))
<b>Transport document description</b>				
UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, II, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, II	UN 1993 Flammable liquid, n.o.s. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, II	UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, II	UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL); ETHYL METHYL KETONE (METHYL ETHYL KETONE)), 3, II
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3
				
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
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)	: F1
Special provisions (ADR)	: 274, 601, 640D
Limited quantities (ADR)	: 11
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T7
Portable tank and bulk container special provisions (ADR)	: TP1, TP8, TP28
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: •3YE

**- Transport by sea**

Special provisions (IMDG)	: 274
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Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP8, TP28
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: B

**- Air transport**

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3
ERG code (IATA)	: 3H

**- Inland waterway transport**

Classification code (ADN)	: F1
Special provisions (ADN)	: 274, 61, 64D
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

**- Rail transport**

Classification code (RID)	: F1
Special provisions (RID)	: 274, 601, 640D
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP8, TP28
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

**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



VOC content	: ca. 85 %
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
7.2	Conditions for safe storage, including any incompatibilities	Modified	
8.1	DNELs & PNECs	Added	
9.1	Flash point	Modified	
10	Stability and reactivity	Added	
15	Regulatory information	Modified	

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
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]:		
Flam. Liq. 2	H225	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*