

Safety data sheet in accordance with Regulation (EC) No 1907/2006

Revision date: 21.07.2017
Replacement of version 0021 of 25.08.2016

Version: 0022

Knauf Aquapanel GmbH & Co. KG

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

1.1 Product identifier

Trade name **AQUAPANEL® Exterior Reinforcing Mesh**
Product number **KAQ_0441**
Item code **58546**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Appropriate use:
The product is used as a reinforcing fabric.

1.3 Details of the supplier of the safety data sheet

Knauf Aquapanel GmbH & Co. KG
Zur Helle 11
D-58638 Iserlohn

Telephone: +49-2374-50360
e-mail: aquapanel.info@knauf.com

Fax: +49-2374-5036300

e-mail-address of the competent person responsible for this Safety Data Sheet:
urban-finking.gefstoff@t-online.de

Technical contact:

Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn
Telephone: +49-2374-50360 Fax: +49-2374-5036300

1.4 Emergency telephone number

Giftnotruf Berlin, Advice in German and English
Telephone: +49-30-30686 790
(24 hours, Monday – Sunday)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product does not meet the criteria for a classification as hazardous in accordance with the current version of Regulation (EC) No 1272/2008.

2.2 Label elements

Hazard pictogram(s):	No pictogram
Signal word(s):	No signal word
Product identifier:	Not required
Hazard statements:	Not required
Precautionary statements:	Not required
Supplemental hazard information:	Not required

2.3 Other hazards

Temporary reversible symptoms after mechanical effects of liberated fiber dust on the eyes, upper respiratory tract and skin cannot be ruled out. This product does not contain any substances classified as PBT/vPvB.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

REACH registration number:

The ingredients do not require registration according to Regulation (EC) No 1207/2006 [REACH] or the registration is scheduled at a later date.

Characterisation

This product is a glass-filament fabric with a fiber diameter of $> 3 \mu\text{m}$, coated with polyvinyl acetate or unsaturated polyester resins.

Substances presenting a health/environmental hazard within the meaning of Regulation (EC) No 1272/2008

The product does not contain substances meeting the criteria for a classification as hazardous in accordance with Regulation (EC) No 1272/2008.

Substances for which Union workplace exposure limits have been assigned (see also Section 8.)

No substances.

Additional information

The product contains the following substances in concentrations $\geq 1\%$ for which there are national workplace exposure limits (see subsection 8.1): fiber dust, no limited evidence of a carcinogenic effect.

The fibers used in this product are not subject to the Directive 97/69/EC.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

None.

In case of inhalation

No first aid measures are necessary if used as intended.

In case of contact with skin

Wash off immediately with soap and water and rinse thoroughly. Seek medical advice if skin irritation persists.

In case of contact with eyes

If fiber dust entering the eyes rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do.
Do not rub eyes, cornea damage is possible by mechanical stress.

In case of ingestion

No first aid measures are necessary if used as intended.

4.2 Most important symptoms and effects, both acute and delayed

Temporary reversible symptoms after mechanical effects of liberated fiber dust on the eyes, upper respiratory tract and skin cannot be ruled out (e.g. burning, lacrimation, itching).

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray jet, powder, carbon dioxide, alcohol resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released: carbon monoxide, carbon dioxide, decomposition products arising from incomplete combustion.

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5.3 *Advice for firefighters*

In enclosed areas use self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 *Personal precautions, protective equipment and emergency procedures*

For non-emergency personnel

Avoid liberation of fiber dust. Ensure adequate ventilation.

For emergency responders

No special measures necessary if used as intended.

6.2 *Environmental precautions*

No special measures necessary if used as intended.

6.3 *Methods and material for containment and cleaning up*

Pick up mechanically. Avoid formation of fiber dust.

6.4 *Reference to other sections*

For personal protective equipment see also Section 8. For disposal considerations see also Section 13.

SECTION 7: Handling and storage

7.1 *Precautions for safe handling*

Advice on safe handling

Avoid formation of fiber dust. If necessary, provide local exhaust ventilation.

In case of formation of fiber dust, comply with the minimum standards in accordance with TRGS 500¹.

In designing the work process the model solutions of the Control Guidance Sheets 100¹, 110¹, 200¹, 240¹ must be taken into consideration.

Advice on general occupational hygiene

Avoid contact with eyes and skin.

Wash hands before breaks and after work; apply skin cream.

7.2 *Conditions for safe storage, including any incompatibilities*

Advice on protection against fire and explosion

No special measures necessary.

Requirements for storage rooms and vessels

Store in a dry place. Protect from moisture.

Protect from direct sunlight.

Advice on storage compatibility

The information about joint storage given in Table 2 of TRGS 510¹ must be observed.

Further information on storage conditions

Do not stock unpackaged product.

Storage temperature: – 10°C up to + 50°C.

Storage class (for Germany only)

LGK 13 (non-flammable solids) in accordance with TRGS 510¹.

7.3 *Specific end use(s)*

The product is only intended for the uses mentioned under subsection 1.2.

Observe technical data sheet.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS No	Identification	Limit values	Remarks
not relevant	fiber dust, no limited evidence of as carcinogenic effect	10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 10 mg/m ³ 20 mg/m ³ 20 mg/m ³ 20 mg/m ³ 5 mg/m ³ 3 mg/m ³ 5 mg/m ³ (respirable aerosol) 1.25 mg/m ³ 6 mg/m ³ 4 mg/m ³ 3 mg/m ³ 5 mg/m ³ 10 mg/m ³ 3 mg/m ³ 5 mg/m ³ 10 mg/m ³	Dust, inhalable National limit values – eight hours Austria Belgium Denmark France Germany Hungary Ireland Spain Sweden National limit values – short term Austria Denmark Germany Dust, respirable National limit values – eight hours Austria Belgium France Germany Hungary Ireland Spain Sweden National limit values – short term Austria Mineral dust, respirable National limit values – eight hours Belgium Denmark National limit values – short term Denmark

Remark: In case of formation of fiber dust during processing and treatment, the limit value must be observed. The methods for measuring chemical agents in workplace atmosphere must meet the general requirements of EN 481, EN 482 and EN 689.

8.2 Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See also subsection 7.1.

In case of dust formation exhaust ventilation at the object (initiation point) is necessary.

The effectiveness of suitable protective measures must be controlled.

Suitable assessment methods are described in the German TRGS 402¹.

Individual protection measures, such as personal protective equipment

Personal protective equipment needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer/supplier of the personal protective equipment.

Eye/face protection

Tightly fitting safety glasses in accordance with EN 166 (in case of fiber dust liberation).



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Hand protection

Work gloves of chromium-free leather or nitrile impregnated cotton gloves.
The protective gloves to be used must comply with the specifications of the standard EN 374.



Body protection

Work clothing.

Respiratory protection

Particle filter half mask FFP1 or half-/quarter-mask (particle filter P1) in case of fiber dust liberation.
The limitations in wearing time according to the DGUV Regel 112-190² (rule of the German employers' liability insurance association) for the use of respirators must be observed.



Thermal hazards

Not relevant.

Environmental exposure controls

See Section 6.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	solid
Colour:	blue
Odour:	odourless
Odour threshold:	no data available
pH (as supplied):	not relevant
pH of an aqueous solution:	not relevant
Melting point / melting range (°C):	not relevant
Softening point (°C):	690 - 840
Boiling point / boiling range (°C):	not relevant
Flash point (°C), closed cup:	not relevant
Evaporation rate:	not relevant
Flammability (solid, gas):	not determined
Upper flammability or explosive limit:	not relevant
Lower flammability or explosive limit:	not relevant
Vapour pressure (20°C) (mbar):	not relevant
Vapour density (20°C):	not relevant
Relative density:	no data available
Density (g/cm ³) (20°C):	2.6
Solubility in water:	very low
Soluble in:	most organic solvents (coating)
Partition coefficient: n-octanol/water:	not relevant
Auto-ignition temperature (°C):	not relevant
Decomposition temperature (°C):	from 200 (coating)
Viscosity:	not relevant
Explosive properties:	not explosive
Oxidising properties:	not relevant

9.2 Other information

None.

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SECTION 10: Stability and reactivity

10.1 *Reactivity*

No data available for the product.

10.2 *Chemical stability*

The product is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 *Possibility of hazardous reactions*

When used as intended, no hazardous reaction known.

10.4 *Conditions to avoid*

When used as intended, no particular conditions to avoid known.

10.5 *Incompatible materials*

No particular materials known.

10.6 *Hazardous decomposition products*

No hazardous decomposition products known.

For hazardous combustion products see subsection 5.2.

SECTION 11: Toxicological information

11.1 *Information on toxicological effects*

No data are available for the product.

Acute toxicity

LD50 rat, oral	(mg/kg)	No data available.
LD50 rat, dermal	(mg/kg)	No data available.
LC50 rat, inhalation	(mg/l/4h)	No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

No data available.

Respiratory or skin sensitisation

No data are available for the product.

Germ cell mutagenicity

The mixture does not contain substances classified as germ cell mutagens.

Carcinogenicity

The glass fibers used in the product do not correspond to the WHO-definition and/or the value of the carcinogenicity index is ≥ 40 .

Reproductive toxicity

The mixture does not contain substances classified as toxic for the reproduction.

Specific target organ toxicity (STOT)-single exposure

The mixture does not contain substances classified as being a specific target organ toxicant after single exposure.

Specific target organ toxicity (STOT)-repeated exposure

The mixture does not contain substances classified as being a specific target organ toxicant after repeated exposure.

Aspiration hazard

The mixture does not contain aspiration toxicants.

Symptoms related to the physical, chemical and toxicological characteristics

Temporary reversible symptoms after mechanical effects of liberated fiber dust on the eyes, upper respiratory tract and skin cannot be ruled out (e.g. burning, lacrimation, itching).

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Temporary reversible symptoms after mechanical effects of liberated fiber dust on the eyes, upper respiratory tract



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and skin cannot be ruled out (e.g. burning, lacrimation, itching).

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

96 h LC50 (fish)	No data available.
48 h EC50 (daphnia)	No data available.
72 h IC50 (algae)	No data available.

Behaviour in sewage works:

The product can be refined mechanically.

12.2 Persistence and degradability

The product is practically insoluble in water.

Chemical oxygen demand (COD)	No data available.
Biochemical oxygen demand (BOD5)	No data available.
AOX-hint	Not to apply.

12.3 Bioaccumulative potential

The product has not been tested.

12.4 Mobility in soil

The product has not been tested.

12.5 Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT/vPvB.

12.6 Other adverse effects

Ozone depletion potential	No data available.
Photochemical ozone creation potential	No data available.
Global warming potential	No data available.
No ecological data available for the product.	
The product is practically insoluble in water.	

Contains according to the formulation following compounds of directives 2006/11/EC and 80/68/EEC:

None.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal according to official state regulations.

Consult the local waste disposal expert about waste disposal.

Disposal operations/recovery operations according to Directive 2008/98/EC

Disposal operations:	D 9	Physico-chemical treatment
Recovery operations:	R 5	Recycling/reclamation of other inorganic materials

Properties of waste which render it hazardous in accordance with Annex III of Directive 2008/98/EC

Not relevant.

Product/unused product

Waste disposal corresponding to European Waste Catalogue. Wastes must be classified with respect to their origin and depending on different processing steps. The waste codes mentioned as follows are only constituted as our recommendations. Referring to the particular case they should be completed or revised.

EC waste code:	10 11 03
Waste notation:	Waste glass-based fibrous material

Alternative:

EC waste code:	17 09 04
Waste notation:	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 und 17 09 03

Contaminated packaging

Recommendation:	Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.
Recommended cleansing agent:	Remove adhering residues mechanically.

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SECTION 14: Transport information

- 14.1 UN number**
No dangerous good in accordance with the UN Model Regulations (ADR/RID/ADN/IMDG/ICAO/IATA).
- 14.2 UN proper shipping name**
Not relevant.
- 14.3 Transport hazard class(es)**
Not relevant.
- 14.4 Packing group**
Not relevant.
- 14.5 Environmental hazards**
Not relevant.
- 14.6 Special precautions for user**
Not relevant.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**
Not relevant.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Information regarding relevant Union safety, health and environmental provisions

None.

Information regarding national laws/national measures that may be relevant (for Germany only)

Restriction of occupation:	Not relevant
Major-accident regulation:	Not relevant
Fire and explosion hazards:	Not relevant
Regulation on clean air (TA Luft):	Number 5.2.1 (exhaust stream in case of liberation of dust during processing and treatment)
Water hazard class:	non-hazardous to water (according to Annex 1 No 2.2 AwSV) ³
German Ordinance on Hazardous Substances (in accordance with EC-Directive 98/24/EC):	Article 6
In case of liberation of dust during processing and treatment:	
German Ordinance on Hazardous Substances (in accordance with EC-Directive 98/24/EC):	Articles 7, 8, 9, 14, Annex I No 2
Regulation on Occupational Medical Prevention (ArbMedVV):	Annex, Part 1 (1): <u>Obligatory prophylaxis:</u> The employer shall arrange occupational medical prophylaxis for workers conducting activities with exposure to inhalable dust, if the occupational exposure limit value is exceeded. Annex, Part 1 (2): <u>Prophylaxis offer:</u> For activities involving inhalable dust occupational medical prevention has to be offered.
Technical Rules for Hazardous Substances ¹ :	TRGS 400, 402, 500, 510, 555, 900
Rules of the employers' liability insurance association ² :	DGUV Regel 112-190, 112-192, 112-195
Informations of the employers' liability insurance association ² :	DGUV Information 250-403
Classification in accordance with the easy-to-use workplace control scheme for hazardous substances of the Federal Institute for Occupational Safety and Health, version 2.2, 2014 ⁴ :	inhalation: hazard group A

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for a substance in the product.

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SECTION 16: Other information

Keeping (restrictions)	Not relevant
Supply	to industry consumer

Full text of the hazard statements referred to under subsections 2.1 and 3.2 of the Safety Data Sheet

Not to apply.

Key to abbreviations and acronyms used in the safety data sheet

ADN:	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ADR:	Accord européen relatif au transport international des marchandises dangereuses par route
AOX:	adsorbable organically bound halogens
AwSV :	Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances that are hazardous to water)
ICAO/IATA:	International Civil Aviation Organisation/International Air Transport Association-Dangerous Goods Regulations
IMDG-Code:	International Maritime Dangerous Goods-Code
LGK:	Lagerklasse (storage class)
PBT:	persistent, bioaccumulative and toxic
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer
TRGS:	Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)
VCI:	Verband der chemischen Industrie (German Association of Chemical Industry)
	vPvB: very persistent and very bioaccumulative Substances)

Literature references and sources for data

- ¹ <http://www.baua.de>
- ² <http://www.arbeitssicherheit.de>
- ³ <http://www.umweltbundesamt.de>
- ⁴ <http://www.baua.de/emkg>

Method used for the classification of the mixture

The product does not meet the criteria for a classification as hazardous in accordance with the current version of Regulation (EC) No 1272/2008.

Changes which have been made to the previous version of the safety data sheet

Revised sections:	1.4, 2.2, 9.1, 12.2, 12.6, 12.7 (deleted), 15.2
	Adaptation of the structure of Sections 3, 4, 5, 6, 7, 8, 11, 13, 15 and 16 to Part B of the Annex of Regulation (EU) 2015/830.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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