

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

Revision date: 06.04.2021
Replacement of version 0025 of 10.08.2020

Version: 0026

Knauf Aquapanel GmbH & Co. KG

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

1.1 *Product identifier*

Trade name **AQUAPANEL® Board Primer**
Product number **KAQ_0437**
Item code **49279, 73789**

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

Appropriate use:
The product is used as a primer/primer coating and as a layer to promote adhesion.

Recommended restrictions on use:

Preclude from exposure and handling this product those persons suffering from an allergy and those persons susceptible to respiratory disease.

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 Fax: +49-2374-5036300
e-mail: aquapanel.info@knauf.com

e-mail-address of the competent person responsible for this Safety Data Sheet:
info@gefstoff.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 der Charité - Universitätsmedizin Berlin, Campus Benjamin Franklin, Haus VIII (Wirtschaftsgebäude), UG
Hindenburgdamm 30, 12203 Berlin
Giftnotruf Berlin +49-30-30686 700 (Advice in German and English)
(24 hours, Monday – Sunday)

SECTION 2: Hazards identification

2.1 *Classification of the substance or mixture*

The product contains sensitising substances in concentrations above one tenth of the specific concentration limit which leads to a classification of the mixture as skin sensitising.
The special labelling requirements of section 2.8 of Annex II of the Regulation must be applied.

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

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn		
Telephone:	+49-(0)2374-50360	Revision date:	06.04.2021

2.2 Label elements

Hazard pictogram(s):	No pictogram
Signal word(s):	No signal word
Product identifier:	AQUAPANEL® Board Primer
Hazard statements:	Not required
Precautionary statements:	P102 Keep out of reach of children. P262 Do not get in eyes, on skin, or on clothing.

Supplemental hazard information:

EUH208	Contains 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Special labelling in accordance with Article 58 (3)

of Regulation (EU) No 528/2012: Contains pyridine-2-thiol-1-oxide, sodium salt to ensure shelf life.

Remarks:

- The statement EUH210 must only appear on the label on the packaging of mixtures not intended for the general public.
- The precautionary statement P102 must only appear on the label of packaging supplied to the general public.

2.3 Other hazards

Preclude from exposure and handling this product those persons suffering from an allergy and those persons susceptible to respiratory disease.

The product is classified as slightly hazardous to water.

The mixture does not contain any substances classified as PBT/vPvB in a concentration of 0.1% or more.

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].

Characterisation

This product is a mixture. It is a synthetic emulsion.

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

CAS No	EC No	Identification	% by weight	Classification
2634-33-5	220-120-9	1,2-benzisothiazol-3(2H)-one	≥ 0.005 - < 0.05	Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Dam. 1; H318 Aquatic Acute 1; H400 M-factor: M = 10
2682-20-4	220-239-6	2-methylisothiazol-3(2H)-one	≥ 0.00015 – < 0.0015	Acute Tox. 3; H301 Acute Tox. 3; H311 Skin Corr. 1B; H314 Skin Sens. 1; H317 Eye Dam. 1; H318 Acute Tox. 2; H330 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-factor (acute): M = 10 M-factor (chronic): M = 1

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn	Revision date:	06.04.2021
Telephone:	+49-(0)2374-50360		

(continued from 3.2 Mixtures)

CAS No	EC No	Identification	% by weight	Classification
55965-84-9	not available	reaction mass of 5-chloro-2-methyl-2 <i>H</i> -isothiazol-3-one and 2-methyl-2 <i>H</i> -isothiazol-3-one (3:1)	≥ 0.00015 – < 0.0015	Acute Tox. 3; H301 Acute Tox. 2; H310 Skin Corr. 1C; H314 Skin Sens. 1A; H317 Eye Dam. 1; H318 Acute Tox. 2; H330 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-factor: M = 100 M-factor (chronic) = 100

See subsection 2.2 for further details. Full text of the hazard statements see Section 16.

Substances for which there are Union workplace exposure limits (see also Section 8.)

No substances.

Additional information

Specific concentration limits for 2-methylisothiazol-3(2*H*)-one:

Skin Sens. 1A; H317: C ≥ 0.0015%

Specific concentration limits 1,2-benzisothiazol-3(2*H*)-one:

Skin Sens. 1; H317: C ≥ 0.05%

Specific concentration limits for reaction mass of 5-chloro-2-methyl-2*H*-isothiazol-3-one and 2-methyl-2*H*-isothiazol-3-one (3:1):

Eye Dam. 1; H318: C ≥ 0,6%

Eye Irrit. 2; H319: 0,06% ≤ C < 0,6%

Skin Corr. 1C; H314: C ≥ 0,6%

Skin Irrit. 2; H315: 0,06% ≤ C < 0,6%

Skin Sens. 1A; H317: C ≥ 0,0015%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Take off contaminated clothing immediately and wash before reuse.

Emergency eyewash should be provided in the immediate working surroundings.

In case of inhalation

Ensure supply of fresh air.

In case of contact with skin

In case of contact with skin wash off with soap and water.

Do not try to remove product crusts from affected parts of the skin by force or by using solvents or thinner.

By continuous complaints seek medical advice.

In case of contact with eyes

In case of contact with 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.

In case of ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting.

Let water be swallowed in little sips (dilution effect). Put victim at rest. Take medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

Possible allergic reaction in case of skin contact.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No information available.

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn		
Telephone:	+49-(0)2374-50360	Revision date:	06.04.2021

SECTION 5: Firefighting measures

5.1 *Extinguishing media*

Suitable extinguishing media

Product itself is non-combustible. Fire extinguishing method of surrounding areas must be discussed.
Carbon dioxide, extinguishing powder, foam, water spray jet.

Unsuitable extinguishing media

Product itself is non-combustible. Fire extinguishing method of surrounding areas must be discussed.

5.2 *Special hazards arising from the substance or mixture*

In the event of fire the following can be released: carbon dioxide, carbon monoxide.

5.3 *Advice for firefighters*

Wear self-contained breathing apparatus. Do not inhale combustion gases.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1 *Personal precautions, protective equipment and emergency procedures*

For non-emergency personnel

Ensure adequate ventilation. Use personal protective clothing.
Keep away from unprotected people.

For emergency responders

For suitable fabric for personal protective clothing see Section 8.

6.2 *Environmental precautions*

Do not discharge into the drains, the aquatic environment and soil.

6.3 *Methods and material for containment and cleaning up*

Absorb with liquid-binding material (e.g. kieselguhr).
Send in suitable containers for recovery or disposal.
Clean contaminated floors and objects thoroughly with detergents, do not use solvents.
Special danger of slipping by leaking/spilling product.

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

Ensure adequate ventilation.
Comply with the minimum standards in accordance with TRGS 500¹.
Moreover, comply with the protective measures in accordance with TRGS 401¹.
In designing the work process the model solutions of the Control Guidance Sheet 120¹ must be taken into consideration in case of small-area skin contact (e.g. splashes) regardless on the duration of skin contact.
In designing the work process the model solutions of the Control Guidance Sheet 120¹ must be taken into consideration in case of large-area skin contact (wetting of the skin) and short-term effect (duration of skin contact less than 15 minutes per shift).
In designing the work process the model solutions of the Control Guidance Sheets 120¹ and 250¹ must be taken into consideration in case of large-area skin contact (wetting of the skin) and long-term effect (duration of skin contact more than 15 minutes per shift).

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn	Revision date:	06.04.2021
Telephone:	+49-(0)2374-50360		

(continued from 7.1 Precautions for safe handling)

Advice on general occupational hygiene

Avoid contact with eyes and skin.
Take off contaminated clothing immediately and wash before reuse.
At work do not eat, drink, smoke or take drugs.
Wash hands before breaks and after work.
Protect skin by using skin protective cream.
Do not try to remove product crusts from affected parts of the skin by force or by using solvents or thinner.
Set out skin protection guidelines.
Emergency eyewash should be provided in the immediate working surroundings.

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

Keep container tightly closed.

Advice on storage compatibility

The information about joint storage given in Table 12 of TRGS 510¹ must be observed.

Further information on storage conditions

Keep only in the original container.
Protect from frost, intensive heat and direct sunlight.
Maximum period of storage (time): unopened storage life 18 months.

Storage class (for Germany only)

LGK 12 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.
In accordance with GISBAU (Information system of the German employers' liability insurance association for building and construction industry):
GISCODE⁴: BSW20 (covering agents, water based)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

The product does not contain substances above cut-off values for which exposure limit values have been assigned.

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.

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 spraying: goggles.

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn		
Telephone:	+49-(0)2374-50360	Revision date:	06.04.2021

(continued from 8.2 Exposure controls)

Hand protection



Protective gloves made of natural latex, neoprene, nitrile rubber, PVC, butyl rubber, fluorinated rubber.
Wear cotton underneath if possible.
The protective gloves to be used must comply with the specifications of the standard EN 374.

Body protection

Closed work clothing. In case of spraying: single-use suit.

Respiratory protection



In case of spraying, higher concentrations and if ventilation insufficient, use a respiratory protection apparatus with respiration filter (particle filter P2).
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 have to 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:	liquid
Colour:	pink
Odour:	slight
Odour threshold:	no data available
Melting point/freezing point (°C):	0
Boiling point/initial boiling point/boiling range (°C):	100
Flammability:	not flammable
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Flash point (°C), closed cup:	not applicable
Auto-ignition temperature (°C):	not applicable
Decomposition temperature (°C):	not determined
pH (as supplied):	8
Kinematic viscosity (mm ² /s):	5454.545
Solubility in water:	completely miscible
Soluble in:	not determined
Partition coefficient: n-octanol/water (log value):	no data available
Vapour pressure (20°C) (hPa):	23
Density (g/cm ³) (20°C):	1.1
Relative vapour density (20°C):	not determined
Particle characteristics:	not applicable

9.2 Other information

None.

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn		
Telephone:	+49-(0)2374-50360	Revision date:	06.04.2021

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 known.

10.5 *Incompatible materials*

When used as intended, 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 hazard classes as defined in Regulation (EC) No 1272/2008*

The product has not been tested.

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 are available.

Serious eye damage/irritation

No data are available.

Respiratory or skin sensitisation

The product has not been tested.

The product contains 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).

These substances are classified as skin sensitising.

Germ cell mutagenicity

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

Carcinogenicity

The mixture does not contain substances classified as carcinogenic.

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

Possible allergic reaction in case of skin contact.

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

Persons suffering from an allergy may be sensitive to very low concentrations of allergenic substances and should consequently have no further contact with this product (possibility of an allergic reaction).

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

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn		
Telephone:	+49-(0)2374-50360	Revision date:	06.04.2021

11.2 Information on other hazards

The mixture has not been tested.

Endocrine disrupting properties

No data available for the mixture.

Other information

None.

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:

When low concentrations are discharged correctly into adapted biological sewage treatment plants, disturbance of the degradation activity of activated sludge is not likely.

12.2 Persistence and degradability

The product can be largely eliminated from the water by abiotic processes, e.g. adsorption by activated sludge.

Do not release into waterways untreated (biological sewage treatment plant).

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

The mixture does not contain any substances classified as PBT/vPvB in a concentration of 0.1% or more.

12.6 Endocrine disrupting properties

No data available for the mixture.

12.7 Other adverse effects

Ozone depletion potential No data available.

Photochemical ozone creation potential No data available.

Global warming potential No data available.

The product is classified as slightly hazardous to water.

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

List II: Biocides and their derivatives not appearing in List I.

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.

Sewage disposal must be avoided.

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

Disposal operations: D 9 Physico-chemical treatment

Recovery operations: R 3 Recycling/reclamation of organic substances which are not used as solvents

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

Not relevant.

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

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn	Revision date:	06.04.2021
Telephone:	+49-(0)2374-50360		

(continued from 13.1 Waste treatment methods)

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.

Dried-out product remainders:

EC waste code: 08 01 12
Waste notation: Waste paint and varnish other than those mentioned in 08 01 11

Liquid product residues:

EC waste code: 08 01 20
Waste notation: Aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19

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 and 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: Water.

Packaging that cannot be cleaned:

EC waste code: 15 01 02
Waste notation: Plastic packaging

SECTION 14: Transport information

14.1 UN number or ID 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 Maritime transport in bulk according to IMO instruments

Not relevant.

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

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn		
Telephone:	+49-(0)2374-50360	Revision date:	06.04.2021

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

- Conditions of restriction in accordance with Annex XVII Regulation (EC) No 1907/2006: None
- The mixture does not contain substances classified as substances of very high concern (SVHC) in accordance with Article 59 of the Regulation (EC) No 1907/2006.
- Directive 2010/75/EU: < 0.1% volatile organic compounds (VOC)
- Directive 2004/42/EC: Subcategory 1.1.h), type WB: binding primers
Maximum VOC content limit value: 30 g/l
Maximum content of the product in a ready to use condition: 1.0 g/l VOC

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

Indications on restriction of occupation:	Not relevant
Major Accident Ordinance:	Not relevant
Fire and explosion hazards:	Not relevant
Regulation on clean air (TA Luft):	Not relevant
Water hazard class:	WGK 1 – slightly hazardous to water (deduction of the WGK according to Annex 1 No 5.2 AwSV) ³ The German Ordinance on facilities for handling substances that are hazardous to water (AwSV) has to be observed
German Ordinance on Hazardous Substances (in accordance with EC-Directive 98/24/EC):	Articles 6, 7, 8 and 14 must be observed.
Technical Rules for Hazardous Substances ¹ :	TRGS 400, 401, 500, 510, 555
Rules of the employers' liability insurance association ² :	DGUV Regel 112-189, 112-190, 112-192, 112-195
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 ⁵ :	skin contact: hazard group HA

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for the mixture.

SECTION 16: Other information

Keeping (restrictions) Article 8 paragraphs 5 and 6 of the German Ordinance on Hazardous Substances has to be observed. (only for Germany)

Supply to professional user, industrial user, to the general public

Full text of the hazard statements referred to under sections 2 and 3 of the Safety Data Sheet

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

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

Trade name:	AQUAPANEL® Board Primer	Product number:	KAQ_0437
Company/Undertaking:	Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn		
Telephone:	+49-(0)2374-50360	Revision date:	06.04.2021

Key or legend 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)
CEPE:	Conseil Européen de l'Industrie des Peintures, des Encres d'Imprimerie et des Couleurs d'Arts (European Council of Paint, Printing Ink and Artist's Colours Industry)
ICAO/IATA:	International Civil Aviation Organisation/International Air Transport Association-Dangerous Goods Regulations
IMDG-Code:	International Maritime Dangerous Goods-Code
IMO:	International Maritime Organization
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

Literature references and sources for data

- <https://www.baua.de>
- <https://www.arbeitssicherheit.de>
- <https://www.umweltbundesamt.de>
- <https://www.wingisonline.de>
- <https://www.baua.de/emkg>

Method used for the classification of the mixture

The classification was undertaken in accordance with the classification criteria of Annex I of Regulation (EC) No 1272/2008.

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

Revised sections: 3.2, 7.2, 9.1, 11.1, 11.2 (new), 12.6 (new), 12.7 (former 12.6), 14.1, 14.7, 15.1, 15.2, 16

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.

Compiled by: **Dr. Michael Urban**
Fachberatung Gefahrstoff Gefahrgut
Vogelbeerweg 3 D-26180 Rastede-Ipwege / Germany
Tel.: +49-4402-695620 Fax: +49-4402-695621