Knauf Aquapanel GmbH & Co. KG

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

1.1 Product identifier
   Trade name: AQUAPANEL® Indoor Joint Adhesive
   Product number: KAQ_0451
   Item code: 103389

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Appropriate use:
   The product is used as an adhesive.

   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:
   urban-flinking.gelstorf@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 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.
2.2 Label elements
Hazard pictogram(s): No pictogram
Signal word(s): No signal word
Product identifier: AQUAPANEL® Indoor Joint Adhesive
Hazard statements: Not required
Precautionary statements: P102 Keep out of reach of children.
Supplemental hazard information:
EUH208 Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no 220-239-6] (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 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no 220-239-6] (3:1) as biocidal active substance.

Remark:
- The use of the EUH208 sentence is based on the CEPE Guidance on labelling decorative paint with skin sensitizing biocides.
- 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.

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 mixture. It is an aqueous polymer dispersion.

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

<table>
<thead>
<tr>
<th>CAS No</th>
<th>EC No</th>
<th>Identification</th>
<th>% by weight</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>55965-84-9</td>
<td>not available</td>
<td>Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no 220-239-6] (3:1)</td>
<td>≥ 0.00015 – &lt; 0.0015</td>
<td>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 M-factor: M = 100 M-factor (chronic) = 100 EUH071</td>
</tr>
</tbody>
</table>

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

Substances for which Union workplace exposure limits have been assigned (see also Section 8.)
No substances.
Additional information
Specific concentration limits for reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no 220-239-6] (3:1):

- Eye Dam. 1; H318: $C \geq 0.6\%$
- Eye Irrit. 2; H319: $0.06\% \leq C < 0.6\%$
- Skin Corr. 1C; H314: $C \geq 0.6\%$
- Skin Irrit. 2; H315: $0.06\% \leq C < 0.6\%$
- Skin Sens. 1A; H317: $C \geq 0.0015\%$

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
If vapours or decomposition products are inhaled, remove the affected person to fresh air.

In case of contact with skin
In case of contact with skin wash off immediately with soap and plenty of water. Do not wash with solvents or diluting agent. 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. Take medical treatment immediately.

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet, foam, carbon dioxide, dry powder.

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 dioxide, carbon monoxide.

5.3 Advice for firefighters
Wear self-contained breathing apparatus. Do not inhale explosion and/or combustion gases. Cool endangered containers with water spray jet. Collect contaminated firefighting water separately, must not be discharged into the drains.
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. sand, kieselguhr, silica gel, acid binder, universal binder, sawdust). Send in suitable containers for recovery or disposal.

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).

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. After worktime and before breaks the affected skin areas must be thoroughly cleaned. After work protect skin by using skin protective cream. 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. Do not use coated metal containers.

Advice on storage compatibility
Do not store together with strong oxidising agents, strong acids and strong alkalies. The information about joint storage given in Table 2 of TRGS 5101 must be observed.

Further information on storage conditions
Keep only in the original container in a cool, well ventilated place. Protect from frost. Recommended storage temperature: 15 – 25°C. Storage period: 15 months.

Storage class (for Germany only)
LGK 12 (non-combustible liquids) in accordance with TRGS 5101.
7.3 Specific end use(s)

The product is only intended for the uses mentioned under subsection 1.2. In accordance with GISBAU (Information system of the German professional associations for building and construction industry):

GISCODE*: D 1 (solvent free, dispersion laminate adhesives)

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.

Hand protection

In case of operations where skin contact is possible, wear suitable protective gloves. Chemical protective gloves needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Suitable: protective gloves of fluoro rubber (Viton); > 0.4 mm.

Wear cotton undermitten if possible.
The protective gloves to be used must comply with the specifications of the standard EN 374.

Body protection

Closed work clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

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: white
Odour: characteristic
Odour threshold: no data available
pH (as supplied) (20°C): 4.5
pH (of an aqueous solution) (20°C): not determined
Melting point/freezing point (°C): not determined
Boiling point and boiling range (°C): 100
Flash point (°C), closed cup: not relevant
Evaporation rate: not determined
Flammability (solid, gas): not relevant
Upper flammability or explosive limit: not relevant
Lower flammability or explosive limit: not relevant
Vapour pressure (20°C) (hPa): not determined
Vapour density (20°C): not determined
Relative density: approx. 1.1
Solubility in water: miscible
Soluble in: not determined
Partition coefficient: n-octanol/water: no data available
Auto-ignition temperature (°C): not relevant
Decomposition temperature (°C): not determined
Dynamic viscosity (mPa · s): approx. 120000
Explosive properties: not explosive
Oxidising properties: not relevant

9.2 Other information
None.

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
Reaction with strong oxidising agents, strong acids and strong alkalies possible.

10.4 Conditions to avoid
Protect from frost.

10.5 Incompatible materials
Reaction with oxidising agents, strong acids and strong alkalies possible.
Do not use coated metal containers.

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) 53 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (RTECS)
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
Irritant effect on eyes
No data available.

Respiratory or skin sensitisation
The product has not been tested.
The product contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no 220-239-6] (3:1). This substance is classified as 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
The product has not been tested.
Possible allergic reaction in case of skin contact.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
The product has not been tested.
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).

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
96 h LC50 (fish) 0.19 mg/l (Oncorhynchus mykiss; rainbow trout)
(reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)) (external safety data sheet)
48 h EC50 (daphnia) 0.12 mg/l (Daphnia magna)
(reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)) (external safety data sheet)
72 h EC50 (algae) 0.027 mg/l (Scenedesmus capricornutum)
(reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)) (external safety data sheet)

Behaviour in sewage works:
The behaviour of the product in sewage treatment plants has not been tested.
Treat by state-of-the-art technology before discharging into drains.
12.2 Persistence and degradability

The product has not been tested.

- Chemical oxygen demand (COD): Not relevant.
- Biochemical oxygen demand (BOD5): Not relevant.
- 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

No data available.

12.6 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 10 Incineration on land
- 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.

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: 08 04 10
Waste notation: Waste adhesives and sealants other than those mentioned in 08 04 09

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 05
- Waste notation: Composite packaging
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)
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 Substances¹: TRGS 400, 401, 500, 510, 555
Rules of the employers’ liability insurance association²: DGUV Regel 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, 2014⁴: skin contact: hazard group HA

15.2 Chemical safety assessment
No chemical safety assessment has been carried out for a substance in the product.
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 industry consumer

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

H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
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.
EIH071 Corrosive to the respiratory tract.

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)
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: 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
RTECS: Registry of Toxic Effects of Chemical Substances
TRGS: Technische Regeln für Gefahrgut (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

1 http://www.baua.de
2 http://www.arbeitssicherheit.de
3 http://www.umweltbundesamt.de
4 http://www.wingis-online.de
5 http://www.cepe.org/efede/public.htm#HTML/3008
6 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: 2.1, 2.3, 3.2, 6.2, 7.2, 11.1, 12.1, 12.6, 15.1, 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