

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830



Article No.: A24826
Print date: 11.07.2019
Version: 1.9

King AQUA Clear Lacquer
Revision date: 02.07.2019
Issue date: 02.07.2019

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

1.1. Product identifier

Article No. (manufacturer/supplier) A24826
Trade name/designation King AQUA Clear Lacquer

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

Relevant identified uses

Coating (Paint, Varnish).

Uses advised against

Do not use for products which come into contact with the food stuffs.

1.3. Details of the supplier of the safety data sheet

Manufacturer/supplier

Heinrich König & Co.KG
An der Rosenhelle 5
D-61138 Niederdorfelden

Telephone: +49 6101 5360 0
Telefax: +49 6101 5360 11

Dept. responsible for information:

Laboratory

Telephone: +49 6101 5360 71

Only available during office hours:

Mon - Thurs 08:00 to 16:00
Friday 08:00 - 12:30

E-mail (competent person)

SDB@heinrich-koenig.de

1.4. Emergency telephone number

Emergency telephone number

Emergency CONTACT (24-Hour-Number): GBK
GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

Additional information

0 percent of the mixture consists of components of unknown hazards to the aquatic environment.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

Hazard statements

No further relevant information available.

Precautionary statements

No further relevant information available.

Hazard components for labelling

No further relevant information available.

Supplemental Hazard information (EU)

EUH208

Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH210

Safety data sheet available on request.

2.3. Other hazards

No information available.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Description Water lacquer

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No.

REACH No.

CAS No.

Designation

Wt %

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INDEX No.	classification: // Remark	
203-905-0	01-2119475108-36-xxxx	
111-76-2	2-butoxyethanol	1 < 2,5
603-014-00-0	Acute Tox. 4 H302 / Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319	
225-878-4	01-2119475527-28-xxxx	
5131-66-8	3-butoxypropan-2-ol	1 < 2,5
603-052-00-8	Eye Irrit. 2 H319 / Skin Irrit. 2 H315	

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

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6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

2-butoxyethanol

INDEX No. 603-014-00-0 / EC No. 203-905-0 / CAS No. 111-76-2

TWA: 123 mg/m³; 25 ppm

STEL: 246 mg/m³; 50 ppm

3-butoxypropan-2-ol

INDEX No. 603-052-00-8 / EC No. 225-878-4 / CAS No. 5131-66-8

TWA: 240 mg/m³; 100 ppm

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

3-butoxypropan-2-ol

INDEX No. 603-052-00-8 / EC No. 225-878-4 / CAS No. 5131-66-8

DNEL long-term dermal (systemic), Workers: 44 mg/kg

DNEL long-term inhalative (systemic), Workers: 270,5 mg/m³

DNEL long-term oral (repeated), Consumer: 8,75 mg/kg

DNEL long-term dermal (systemic), Consumer: 16 mg/kg

DNEL long-term inhalative (systemic), Consumer: 33,8 mg/m³

2-butoxyethanol

INDEX No. 603-014-00-0 / EC No. 203-905-0 / CAS No. 111-76-2

DNEL acute dermal, short-term (systemic), Workers: 89 mg/kg

DNEL long-term dermal (systemic), Workers: 75 mg/kg

DNEL acute inhalative (local), Workers: 246 mg/m³

DNEL acute inhalative (systemic), Workers: 663 mg/m³

DNEL long-term inhalative (systemic), Workers: 98 mg/m³

DNEL short-term oral (acute), Consumer: 13,4 mg/kg

DNEL long-term oral (repeated), Consumer: 3,2 mg/kg

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DNEL acute dermal, short-term (systemic), Consumer: 44,5 mg/kg
DNEL long-term dermal (systemic), Consumer: 38 mg/kg
DNEL acute inhalative (local), Consumer: 123 mg/m³
DNEL acute inhalative (systemic), Consumer: 426 mg/m³
DNEL long-term inhalative (systemic), Consumer: 49 mg/m³

PNEC:

3-butoxypropan-2-ol

INDEX No. 603-052-00-8 / EC No. 225-878-4 / CAS No. 5131-66-8

PNEC aquatic, freshwater: 0,525 mg/l
PNEC aquatic, marine water: 0,0525 mg/l
PNEC aquatic, intermittent release: 5,25 mg/l
PNEC sediment, freshwater: 2,36 mg/kg
PNEC sediment, marine water: 0,236 mg/kg
PNEC, soil: 0,16 mg/kg
PNEC sewage treatment plant (STP): 10 mg/l

2-butoxyethanol

INDEX No. 603-014-00-0 / EC No. 203-905-0 / CAS No. 111-76-2

PNEC aquatic, freshwater: 8,8 mg/l
PNEC aquatic, marine water: 0,88 mg/l
PNEC sediment, freshwater: 34,6 mg/kg
PNEC sediment, marine water: 3,46 mg/kg
PNEC, soil: 2,8 mg/kg
PNEC sewage treatment plant (STP): 463 mg/l

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: Butyl caoutchouc (butyl rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state:

Liquid

Colour:

colourless

Odour:

characteristic

Odour threshold:

not determined

pH at 20 °C:

N.A.

Melting point/freezing point:

n.a.

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Initial boiling point and boiling range:	100 °C Method: calculated. Source: Wasser, demineralisiert
Flash point:	No further relevant information available.
Evaporation rate:	not determined
flammability	
Burning time (s):	not determined
Upper/lower flammability or explosive limits:	
Lower explosion limit:	2,21 Vol-% Method: calculated.
Upper explosion limit:	14 Vol-% Method: calculated. Source: (2-methoxymethylethoxy)propanol
Vapour pressure at 20 °C:	11,0374 mbar Method: calculated.
Vapour density:	not determined
Relative density:	
Density at 20 °C:	1,01 g/cm³ Method: calculated.
Solubility(ies):	
Water solubility (g/L) at 20 °C:	miscible
Partition coefficient: n-octanol/water:	see section 12
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
Viscosity at 20 °C:	30 s 3 mm Method: EN ISO 2431
Explosive properties:	not determined
Oxidising properties:	not determined
9.2. Other information	
Solid content (%):	26,17 Wt %
solvent content:	
Organic solvents:	13 Wt %
Water:	61 Wt %

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

11.1. Information on toxicological effects

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Acute toxicity

3-butoxypropan-2-ol
oral, LD50, Rat: 3300 mg/kg
dermal, LD50, Rat: > 2000 mg/kg
inhalative (vapours), LC50, Rat: > 3,5 mg/l (4 h)
Based on available data, the classification criteria are not met.

2-butoxyethanol
inhalative (vapours), LC50, Rat: 2 - 20 mg/l (4 h)
Harmful if swallowed, in contact with skin or if inhaled.

Skin corrosion/irritation; Serious eye damage/eye irritation

3-butoxypropan-2-ol
Skin (4 h)
Causes skin irritation.
eyes
Causes eye irritation.

2-butoxyethanol
Skin, Rabbit
Method: OECD 405
Causes skin irritation.
eyes, Rabbit
Irritating to eyes.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Based on available data, the classification criteria are not met.

STOT-single exposure; STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience/human evidence

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
Do not allow to enter into surface water or drains.

12.1. Toxicity

3-butoxypropan-2-ol
Fish toxicity, LC50, *Poecilia reticulata* (Guppy) 560 - 1000 mg/l (96 h)
Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): > 1000 mg/l (48 h)
Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: > 1000 mg/l (96 h)
Bacteria toxicity, EC50: > 1000 mg/l (3 h)
Based on available data, the classification criteria are not met.

2-butoxyethanol
Fish toxicity, LC50, *Oncorhynchus mykiss* (Rainbow trout): 1474 mg/l (96 h)
Method: OECD 203
Daphnia toxicity, EC50, *Daphnia magna*: 1550 mg/l (48 h)
Method: OECD 202
Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: 1840 mg/l (72 h)
Method: OECD 201
Bacteria toxicity, *Pseudomonas putida*: 700 mg/l (16 h)
Based on available data, the classification criteria are not met.

Long-term Ecotoxicity

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2-butoxyethanol

Fish toxicity, NOEC, Brachydanio rerio (zebra-fish): > 100 mg/l (21 D)
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 100 mg/l (21 D)

Method: OECD 211

Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

3-butoxypropan-2-ol

, OECD 301E/ EEC 92/69/V, C.4-B: 90 % (28 D)

Readily biodegradable (according to OECD criteria).

2-butoxyethanol

Biodegradation, Activated sludge: 90 % (28 D)

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

3-butoxypropan-2-ol

Partition coefficient: n-octanol/water: 1,2

2-butoxyethanol

Partition coefficient: n-octanol/water: 0,81

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080112 waste paint and varnish other than those mentioned in 08 01 11

Appropriate disposal / Package

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

This mixture is not classified as dangerous according to international transport regulations (ADR/RID, IMDG, ICAO/IATA).

No dangerous good in sense of this transport regulation.

14.1. UN number

No further relevant information available.

14.2. UN proper shipping name

14.3. Transport hazard class(es)

No further relevant information available.

14.4. Packing group

No further relevant information available.

14.5. Environmental hazards

Land transport (ADR/RID)

No further relevant information available.

Marine pollutant

No further relevant information available.

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14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

tunnel restriction code -

Sea transport (IMDG)

EmS-No. No further relevant information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 34,385

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
203-905-0 111-76-2	2-butoxyethanol	01-2119475108-36-xxxx
225-878-4 5131-66-8	3-butoxypropan-2-ol	01-2119475527-28-xxxx

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air

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IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version