

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 2 Dec 2020

Print date: 3 May 2021

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Akasolv Aqua Care

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

1.1. Product identifier

Trade name/designation:

Akasolv Aqua Care

Article No.:

1719

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

Use of the substance/mixture:

preservatives

Water treatment chemicals

Relevant identified uses:

Life cycle stage [LCS]

PW: Widespread use by professional workers

SL: Service life

Sector of uses [SU]

SU 4: Manufacture of food products

Product Categories [PC]

PC 37: Water treatment chemicals

Process categories [PROC]

PROC 5: Mixing or blending in batch processes

PROC 7: Industrial spraying

PROC 8a: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC 11: Non industrial spraying

PROC 19: Manual activities involving hand contact

PROC 28: Manual maintenance (cleaning and repair) of machinery

Environmental release categories [ERC]

ERC 2: Formulation into mixture (mixtures)

ERC 4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC 8d: Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Akadia Chemie

Konrad-Adenauer-Ring 70

68723 Plankstadt

Germany

Telephone: 06202 - 95025 40

Telefax: 06202 - 95025 44

E-mail: info@akadia.de

Website: www.akadia.de

E-mail (competent person): info@akadia.de

1.4. Emergency telephone number

Dr. A. Kilic, 24h: (+49) 172 - 630 87 97, 06202 - 95025 44 (Only available during office hours.)

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	

* 2.2. Label elements

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

Hazard pictograms:



GHS07

Exclamation mark

Signal word: Warning

Hazard components for labelling:

Polyhexamethylene biguanide hydrochloride (PHMB); Dimethyl amine-epichlorohydrin copolymer; propan-2-ol

hazard statements for health hazards

H319	Causes serious eye irritation.
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Hazard statements for environmental hazards

H412	Harmful to aquatic life with long lasting effects.
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Supplemental hazard information: -

Precautionary Statements Prevention

P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements Response

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Precautionary Statements Disposal

P501	Dispose of contents/container to an approved waste disposal plant.
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2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Description:

Mixture of hereinafter listed substances and non-hazardous materials

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Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 67-63-0 EC No.: 200-661-7 REACH No.: 01-2119457558-25-XXXX	propan-2-ol Eye Irrit. 2, Flam. Liq. 2, STOT SE 3 Danger H225-H319-H336	0 - ≤ 5 weight-%
CAS No.: 25988-97-0	Dimethyl amine-epichlorohydrin copolymer Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1 Danger H302-H400-H410	0 - ≤ 1 weight-%
CAS No.: 1802181-67-4	Polyhexamethylene biguanide hydrochloride (PHMB) Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1, Eye Dam. 1, STOT SE 3 Danger H318-H332-H335-H400-H410 M-factor (acute): 10 M-factor (chronic): 1	0 - ≤ 1 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Take off immediately all contaminated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion:

Rinse mouth. Let water be drunk in little sips (dilution effect). Get immediate medical advice/attention. Get medical advice/attention if you feel unwell.

Self-protection of the first aider:

Use personal protection equipment.

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

Serious eye damage/eye irritation

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media:

none known

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Hazardous combustion products:

In case of fire: Gases/vapours, toxic

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5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove persons to safety.

Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

Emergency procedures:

Provide adequate ventilation.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Dispose of in accordance with local regulations. Inform local authorities in case of non-containable amounts

For cleaning up:

Use water.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8). Ensure adequate ventilation by air exchange/exhaust ventilation. Avoid formation of aerosols.

Measures to prevent aerosol and dust generation:

Individually depending on the application method.

Environmental precautions:

Avoid release to the environment.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Protect container from dirt. Use original lid! Keep away from heat sources, store cool and protect from light. Never return taken out amounts of product to the original container. Do not store below melting point. Keep container tightly closed in a cool, well-ventilated place.

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Packaging materials:

Suitable materials are: container made of polyethylene (HDPE, LDPE), polypropylene, PVC, glass, stainless steel.

Unsuitable are: container from all kinds of metals except stainless steel.

Requirements for storage rooms and vessels:

Use original container and original lid for storage exclusively. Store product in a well ventilated, appropriate storage room suited for chemicals.

Hints on storage assembly:

none

Storage class: 12 - non-combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions:

Hygiene measures: Keep away from food, drink and animal feed. Do not eat, drink and smoke during work. Wash hands before breaks and after work. Remove contaminated clothing immediately.

7.3. Specific end use(s)

Recommendation:

Water treatment chemicals

SECTION 8: Exposure controls/personal protection

*

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
WEL (GB)	propan-2-ol CAS No.: 67-63-0	① 400 ppm (999 mg/m ³) ② 500 ppm (1,250 mg/m ³)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
propan-2-ol CAS No.: 67-63-0	500 mg/m ³	① DNEL worker ② inhalative, long-term, systemic
propan-2-ol CAS No.: 67-63-0	89 mg/m ³	① DNEL Consumer ② inhalative, long-term, systemic
propan-2-ol CAS No.: 67-63-0	888 mg/kg bw/day	① DNEL worker ② dermal, long-term, systemic
propan-2-ol CAS No.: 67-63-0	319 mg/kg bw/day	① DNEL Consumer ② dermal, long-term, systemic
propan-2-ol CAS No.: 67-63-0	26 mg/kg bw/day	① DNEL Consumer ② oral, long-term, systemic

Substance name	PNEC Value	① PNEC type
propan-2-ol CAS No.: 67-63-0	140.9 mg/l	① PNEC aquatic, freshwater
propan-2-ol CAS No.: 67-63-0	140.9 mg/l	① PNEC aquatic, marine water
propan-2-ol CAS No.: 67-63-0	2,251 mg/l	① PNEC sewage treatment plant

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Substance name	PNEC Value	① PNEC type
propan-2-ol CAS No.: 67-63-0	552 mg/kg	① PNEC sediment, freshwater
propan-2-ol CAS No.: 67-63-0	552 mg/kg	① PNEC sediment, marine water
propan-2-ol CAS No.: 67-63-0	160 mg/kg	① PNEC secondary poisoning
propan-2-ol CAS No.: 67-63-0	140.9 mg/l	① PNEC aquatic, intermittent release
propan-2-ol CAS No.: 67-63-0	28 mg/kg	① PNEC soil, freshwater

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate ventilation.

8.2.2. Personal protection equipment



Eye/face protection:

Eye glasses with side protection DIN EN 166

Skin protection:

Tested protective gloves must be worn EN ISO 374

Suitable material:

butyl rubber, neoprene rubber, polychloroprene.

FKM (fluoro rubber)

Obtain permeation time (max. wearing period) from manufacturer.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

Observe skin-protection plan.

Respiratory protection:

No respiratory protection necessary if used according to intention. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable filter: NO-P3.

Thermal hazards:

none known

Other protection measures:

none

8.2.3. Environmental exposure controls

Avoid release to the environment. See section 13.

8.3. Additional information

not applicable

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: blue

Odour: characteristic

Safety relevant basis data

parameter		at °C	Method	Remark
pH	6.6	20 °C		
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	≈ 100 °C			
Decomposition temperature	<i>not determined</i>			

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parameter		at °C	Method	Remark
Flash point	<i>not applicable</i>			
Evaporation rate	<i>not determined</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	≈ 1	20 °C		
Bulk density	<i>not applicable</i>			
Water solubility	0 - 100 %	20 °C		
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>	40 °C		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known if stored and handled appropriately. The product itself does not burn.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

none known

10.4. Conditions to avoid

none known

10.5. Incompatible materials

Oxidizing agent

10.6. Hazardous decomposition products

In case of fire: Gases/vapours, toxic

Further information

none

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
67-63-0	propan-2-ol	LD₅₀ oral: 5,840 mg/kg (Rat) OECD 401 LC₅₀ Acute inhalation toxicity (vapour): >25 mg/l 6 h (Rat) OECD 403 LD₅₀ dermal: 13,900 mg/kg (Rabbit) OECD 402
25988-97-0	Dimethyl amine-epichlorohydrin copolymer	LD₅₀ oral: 1,672 mg/kg (Rat) OECD 401 LD₅₀ dermal: >2,000 mg/kg (Rat) OECD 402
180218 1-67-4	Polyhexamethylene biguanide hydrochloride (PHMB)	LD₅₀ oral: >2,000 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (Rat) LC₅₀ Acute inhalation toxicity (dust/mist): 1.61 mg/l 4 h Calculation method.

Acute oral toxicity:

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

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

Skin corrosion/irritation:

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

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation:

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

Germ cell mutagenicity:

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

Carcinogenicity:

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

Reproductive toxicity:

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

STOT-single exposure:

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

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.

Additional information:

No data available

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SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
67-63-0	propan-2-ol	LC₅₀ : 9,640 mg/l 4 d (fish, Pimephales promelas (fathead minnow)) OECD 203 LC₅₀ : 9,714 mg/l 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202 EC₅₀ : >100 mg/l 3 d (Algae/water plant, Scenedesmus subspicatus) LOEC : 1,000 mg/l (Algae/water plant)
25988-97-0	Dimethyl amine-epichlorohydrin copolymer	LC₅₀ : 0.077 mg/l 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) OECD 203 EC₅₀ : 0.084 mg/l 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202 EC₅₀ : 0.09 mg/l 3 d (Algae/water plant, Desmodium subspicatus) OECD 201
180218 1-67-4	Polyhexamethylene biguanide hydrochloride (PHMB)	LC₅₀ : 1.6 mg/l 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) OECD 203 EC₅₀ : 0.78 mg/l 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202 EC₅₀ : 0.1 mg/l 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201

Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

CAS No.	Substance name	Biodegradation	Remark
67-63-0	propan-2-ol	Yes, rapidly	mobile
25988-97-0	Dimethyl amine-epichlorohydrin copolymer	Yes, slowly	
180218 1-67-4	Polyhexamethylene biguanide hydrochloride (PHMB)	Yes, slowly	Removal by adsorption on activated sludge. No bioaccumulation. Not PBT / vPvB.

12.3. Bioaccumulative potential

CAS No.	Substance name	Log K _{OW}	Bioconcentration factor (BCF)
67-63-0	propan-2-ol	0.05	

Accumulation / Evaluation:

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
67-63-0	propan-2-ol	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.
25988-97-0	Dimethyl amine-epichlorohydrin copolymer	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.
180218 1-67-4	Polyhexamethylene biguanide hydrochloride (PHMB)	The substance in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Observe local regulations for waste disposal.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

20 01 29 *	Detergents containing hazardous substances
16 10 03 *	aqueous concentrates containing hazardous substances

*: Evidence for disposal must be provided.

Remark:

none

Waste code packaging:

15 01 10 *	packaging containing residues of or contaminated by dangerous substances
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*: Evidence for disposal must be provided.

Remark:

List of proposed waste codes/waste designations in accordance with AAV:

Waste treatment options

Appropriate disposal / Product:

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Completely emptied packages can be recycled.

Other disposal recommendations:

none

13.2. Additional information

No additional regulations concerning waste..

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

Land transport (ADR/RID)	Sea transport (IMDG)	
14.1. UN-No.		
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	
14.2. UN proper shipping name		
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	
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		

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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Authorisations:

Currently no authorisation mandatory.

Restrictions on use:

Suitable for professional/industrial use only.

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

Classification and labeling of the product according to CLP-VO (VO (EG) 1272/2008). The compounds are preregistered according to REACH (VO (EG) 1907/2008) if required.

15.1.2. National regulations

[GB] National regulations

Other regulations, restrictions and prohibition regulations

none

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment is not required.

15.3. Additional information

none

SECTION 16: Other information

16.1. Indication of changes

2.2.	Label elements
8.1.	Control parameters
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

This MSDS was generated using information provided by supplier MSDS for the individual compounds as well as information obtained through the gestis-material database (<http://gestis.itrust.de>) maintained by the german social accident insurance DGUV.

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
Hazardous to the aquatic environment (<i>Aquatic Chronic 3</i>)	H412: Harmful to aquatic life with long lasting effects.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H318	Causes serious eye damage.

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Hazard statements

H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

16.6. Training advice

Appropriate training prior to using this product is necessary as well as an annual training for the general handling of hazardous materials, targeting specific workplace issues.

16.7. Additional information

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.

* Data changed compared with the previous version