

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2022

Version number 3 (replaces version 2)

Revision: 29.08.2022

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

1.1 Product identifier

- Trade name: **Crystal Clean Spray-Refill**
- Article number: 10954, 11903, 11074
- CAS Number: 7732-18-5
- EC number: 231-791-2
- Registration number: 02-2119752839-21-0000
- UFI: 6U2M-MJTC-J012-YJ7V

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

No further relevant information available.

Application of the substance / the mixture

Cleaning agent/ Cleaner

1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg
- Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de

Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms

The substance is classified and labelled according to the CLP regulation.



GHS07

Signal word

Warning

Hazard-determining components of labelling:

2-methyl-2H-isothiazol-3-one

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read carefully and follow all instructions.
- P261 Avoid breathing mist/vapours/spray.
- P280 Wear protective gloves.
- P302+P352 IF ON SKIN: Wash with plenty of water.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Contains biocidal products: 2-methyl-2H-isothiazol-3-one, 1,2-benzisothiazol-3(2H)-one

2.3 Other hazards

- Results of PBT and vPvB assessment

- PBT: Not applicable.

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· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients**3.1 Substances**

- CAS No. Description 7732-18-5 water, distilled, conductivity or of similarpurity
- Identification number(s)
- EC number: 231-791-2
- Description: Mixture: consisting of the following components.

· Dangerous components:

2682-20-4	2-methyl-2H-isothiazol-3-one Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330 Skin Corr. 1B, H314; Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1) Skin Sens. 1A, H317; STOT SE 3, H335 EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.0015 %	<1%
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· Regulation (EC) No 648/2004 on detergents / Labelling for contents

preservation agents (BENZISOTHIAZOLINONE, METHYLISOTHIAZOLINONE), perfumes <5%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information: Take affected persons out into the fresh air.
No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NO_x)
Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters

- Protective equipment: No special measures required.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
- **6.2 Environmental precautions:**
 - Ensure adequate ventilation
 - Do not allow product to reach sewage system or any water course.
 - Inform respective authorities in case of seepage into water course or sewage system.
 - Dilute with plenty of water.
 - Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
 - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.
 - No dangerous substances are released.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 - No special measures required.
- **Information about fire - and explosion protection:**
 - No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
 - Requirements to be met by storerooms and receptacles:
 - Store only in the original receptacle.
 - Information about storage in one common storage facility:
 - Store away from oxidising agents.
 - Store away from foodstuffs.
- **Further information about storage conditions:**
 - Protect from frost.
- **Storage class:**
 - 12
- **7.3 Specific end use(s)**
 - No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
 - Not required.
- **Additional information:**
 - The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls**
 - No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
 - Do not eat, drink, smoke or sniff while working.
 - Use skin protection cream for skin protection.
 - Clean skin thoroughly immediately after handling the product.
- **Respiratory protection:**
 - Not required.
- **Hand protection**
 - No chemical-protective gloves required.
 - Preventive skin protection by use of skin-protecting agents is recommended.

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Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:
STOKODERM (<http://www.stoko.com>)

Skin protection recommendation for skin cleaning after product handling:
FRAPANTOL (<http://www.stoko.com>)

Skin protection agent recommendation for skin aftercare:
STOKO VITAN (<http://www.stoko.com>)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection

Goggles recommended during refilling

SECTION 9: Physical and chemical properties· **9.1 Information on basic physical and chemical properties**· General Information

· <u>Colour:</u>	Colourless
· <u>Odour:</u>	Odourless
· <u>Melting point/freezing point:</u>	0 °C
· <u>Boiling point or initial boiling point and boiling range</u>	100 °C
· <u>Lower and upper explosion limit</u>	
· <u>Lower:</u>	Not determined.
· <u>Upper:</u>	Not determined.
· <u>Flash point:</u>	Not applicable.
· <u>pH</u>	Not determined.
· <u>Viscosity:</u>	
· <u>Kinematic viscosity at 20 °C</u>	11 s (DIN 53211/4)
· <u>Dynamic at 20 °C:</u>	0.952 mPas
· <u>Solubility</u>	
· <u>water:</u>	Fully miscible.
· <u>Partition coefficient n-octanol/water (log value)</u>	Not determined.
· <u>Vapour pressure at 20 °C:</u>	23 hPa
· <u>Density and/or relative density</u>	
· <u>Density at 20 °C:</u>	1 g/cm ³

· **9.2 Other information**· Appearance:

· Form: Fluid

· Important information on protection of health and environment, and on safety.

· Explosive properties: Product does not present an explosion hazard.

· Organic solvents: 0.3 %

· Water: 99.5 %

· Molecular weight 18.02 g/mol

· Information with regard to physical hazard classes· Explosives

Void

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· <u>Flammable gases</u>	Void
· <u>Aerosols</u>	Void
· <u>Oxidising gases</u>	Void
· <u>Gases under pressure</u>	Void
· <u>Flammable liquids</u>	Void
· <u>Flammable solids</u>	Void
· <u>Self-reactive substances and mixtures</u>	Void
· <u>Pyrophoric liquids</u>	Void
· <u>Pyrophoric solids</u>	Void
· <u>Self-heating substances and mixtures</u>	Void
· <u>Substances and mixtures, which emit flammable gases in contact with water</u>	Void
· <u>Oxidising liquids</u>	Void
· <u>Oxidising solids</u>	Void
· <u>Organic peroxides</u>	Void
· <u>Corrosive to metals</u>	Void
· <u>Desensitised explosives</u>	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

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- **10.2 Chemical stability**
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
 - Reacts with strong acids.
 - Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- Acute toxicity Based on available data, the classification criteria are not met.

- LD/LC50 values relevant for classification:

7732-18-5 water, distilled, conductivity or of similarpurity

Oral LD50 >89,800 mg/kg (rat)

- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation May cause an allergic skin reaction.
- 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.
- **11.2 Information on other hazards**

- Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- PBT: Not applicable.
- vPvB: Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- Additional ecological information:
- General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- Recommendation Smaller quantities can be disposed of with household waste.

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· European waste catalogue

20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
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20 01 00	separately collected fractions (except 15 01)
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20 01 29*	detergents containing hazardous substances
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15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
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15 01 00	packaging (including separately collected municipal packaging waste)
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15 01 10*	packaging containing residues of or contaminated by hazardous substances
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· Uncleaned packaging:· Recommendation: Disposal must be made according to official regulations.· Recommended cleansing agents: Water, if necessary together with cleansing agents.**SECTION 14: Transport information**· **14.1 UN number or ID number**

· ADR, ADN, IMDG, IATA Void

· **14.2 UN proper shipping name**

· ADR, ADN, IMDG, IATA Void

· **14.3 Transport hazard class(es)**

· ADR, ADN, IMDG, IATA

· Class Void· **14.4 Packing group**

· ADR, IMDG, IATA Void

· **14.5 Environmental hazards:**· Marine pollutant: No· **14.6 Special precautions for user**

Not applicable.

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· Transport/Additional information:

Not dangerous according to the above specifications.

· UN "Model Regulation":

Void

SECTION 15: Regulatory information· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**· Directive 2012/18/EU· Named dangerous substances -

ANNEX I

Substance is not listed.

· REGULATION (EC) No 1907/2006

ANNEX XVII

Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

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· REGULATION (EU) 2019/1148· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:· Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· VOC EU 2.8 g/l· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS:

Laboratory

· Contact:

Elke Hake

Fon ++49 (0)911 64296-59

@mail E.Hake@akemi.de

· Date of previous version:

29.08.2022

· Version number of previous version:

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· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organisation
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 3: Acute toxicity – Category 3
 Acute Tox. 2: Acute toxicity – Category 2
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 Skin Sens. 1A: Skin sensitisation – Category 1A
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1