Safety data sheet according to 1907/2006/EC, Article 31

AKEMI®

| rinting date 02.05.2018 | Version number 10 | Revision: 02.02.2018 |
|--|---|--|
| SECTION 1: Identification of the | e substance/mixture and of the company/undert | taking |
| • <u>1.1 Product identifier</u> • Trade name: | Techno-Ceramic Intensive Cleaner | |
| | | |
| Article number: <u>1.2 Relevant identified uses of</u> the substance or mixture and | 12026 | |
| uses advised against · Application of the substance / the | | |
| mixture | Cleaning agent/ Cleaner | |
| · 1.3 Details of the supplier of the | | |
| <u>Manufacturer/Supplier:</u> | AKEMI chemisch technische Spezialfabrik Gmbł Lechstrasse 28 D 90451 Nürnberg | H Tel. +49(0)911-642960 Fax. +49(0)911-644456 e-mail info@akemi.de |
| Further information obtainable from: 1.4 Emergency telephone | Laboratory | |
| | Tel. +49(0)911-64296-59 Reachable during the following office hours: Monday – Thursday from 07:30 a.m. to 16:30 p.r Friday from 07:30 a.m. to 13:30 p.m. +44 (171) 635 91 91 National Poison Inform. Centre | m. |
| Classification according to Regula | nce or mixture | |
| SECTION 2: Hazards identification • 2.1 Classification of the substant • Classification according to Regular • Classification according to Regular • GHS07 Eye Irrit. 2 H319 Causes serious • 2.2 Label elements • Labelling according to Regulation | Avalonley Road London SE14 5ER ion <u>nce or mixture</u> ation (EC) No 1272/2008 | |
| 2.1 Classification of the substant Classification according to Regula GHS07 Eye Irrit. 2 H319 Causes serious 2.2 Label elements | Avalonley Road London SE14 5ER ion <u>nce or mixture</u> ation (EC) No 1272/2008 | to the CLP regulation. |
| 2.1 Classification of the substant Classification according to Regulation Classification according to Regulation GHS07 Eye Irrit. 2 H319 Causes serious 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 | Avalonley Road London SE14 5ER ion <u>nce or mixture</u> ation (EC) No 1272/2008 | to the CLP regulation. |
| 2.1 Classification of the substant Classification according to Regulation Classification according to Regulation Eye Irrit. 2 H319 Causes serious 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 Hazard pictograms Signal word | Avalonley Road London SE14 5ER ion <u>nce or mixture</u> ation (EC) No 1272/2008 s eye irritation. | to the CLP regulation. |
| 2.1 Classification of the substant Classification according to Regulation Classification according to Regulation GHS07 Eye Irrit. 2 H319 Causes serious 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 Hazard pictograms | Avalonley Road London SE14 5ER ion <u>nce or mixture</u> ation (EC) No 1272/2008 s eye irritation. The product is classified and labelled according to GHS07 Warning Not applicable. H319 Causes serious eye irritation. | to the CLP regulation. |
| 2.1 Classification of the substant Classification according to Regular Classification according to Regular GHS07 Eye Irrit. 2 H319 Causes serious 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 Hazard pictograms Signal word Hazard-determining components of labelling: Hazard statements | Avalonley Road London SE14 5ER ion <u>nce or mixture</u> ation (EC) No 1272/2008 s eye irritation. The product is classified and labelled according to GHS07 Warning Not applicable. H319 Causes serious eye irritation. P101 If medical advice is needed, at hand. P102 Keep out of reach of children. P103 Read label before use. P280 Wear eye protection / face pro P305+P351+P338 IF IN EYES: Rinse cautiously | have product container or labe rotection. |

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· 2.3 Other hazards

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture: consisting of the following components.

| · Dangerous components: | | | |
|---|--|---|------|
| | non-ionic surfactants | Eye Dam. 1, H318 Acute Tox. 4, H302 Aquatic Chronic 3, H412 | 1-5% |
| CAS: 112-34-5 EINECS: 203-961-6 Index number: 603-096-00-8 Reg.nr.: 01-2119475104-44-xxxx 02-2119751533-40-0000 | | � Eye Irrit. 2, H319 | 1-5% |
| Regulation (EC) No 648/2004 on 6 | detergents / Labelling for contents | | |
| non-ionic surfactants, perfumes | | | <5% |
| Additional information: | For the wording of the listed hazard phrases ref | er to section 16. | |

SECTION 4: First aid measures

1 1 Description of first aid measures

| • 4.1 Description of mist alu meas | | |
|------------------------------------|--|--|
| General information: | 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. | |
| 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 | If swallowed, gastric irrigation with added, activated carbon. | |
| | | |
| 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) Under certain fire conditions, traces of other toxic gases cannot be excluded. |
| • <u>5.3 Advice for firefighters</u> • <u>Protective equipment:</u> | No special measures required. |

SECTION 6: Accidental release measures

| · 6.1 Personal precautions, | |
|-----------------------------|--|
| protective equipment and | |
| emergency procedures | Product forms slippery surface when combined with water. |

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| | | |

| · 6.2 Environmental precautions: | 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. |
| | 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 | No dangerous substances are released. |
| | See Section 7 for information on safe handling. |
| | See Section 8 for information on personal protection equipment. |
| | See Section 13 for disposal information. |

SECTION 7: Handling and storage

| 7.1 Precautions for safe | |
|--|--|
| handling | No special measures required. |
| Information about fire - and | |
| explosion protection: | The product is not flammable. No special measures required. |

· 7.2 Conditions for safe storage, including any incompatibilities

| Store only in the original receptacle. |
|--|
| |
| Store away from foodstuffs. |
| Store away from oxidising agents. |
| |
| Protect from frost. |
| 10 |
| No further relevant information available. |
| |

SECTION 8: Exposure controls/personal protection

| · Additional information about | |
|---------------------------------|------------------------------|
| design of technical facilities: | No further data; see item 7. |

· 8.1 Control parameters

| Ingredients with limit values that require monitoring at the workplace: | |
|--|--|
| 112-34-5 2-(2-butoxyethoxy)etha | nol |
| WEL Short-term value: 101.2 mg/ Long-term value: 67.5 mg/m | |
| Additional information: | The lists valid during the making were used as basis. |
| 8.2 Exposure controls Personal protective equipment: General protective and hygienic | |
| <u>measures:</u> <u>Respiratory protection:</u> <u>Protection of hands:</u> | The usual precautionary measures are to be adhered to when handling chemicals. Avoid close or long term contact with the skin. Do not eat, drink, smoke or sniff while working. Use skin protection cream for skin protection. Clean skin thoroughly immediately after handling the product. Not required. Preventive skin protection by use of skin-protecting agents is recommended. After use of gloves apply skin-cleaning agents and skin cosmetics. Skin protection agent recommendation for preventive skin shelter without use of |
| | protective gloves: |
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|--|---|
| | STOKO EMULSION (http://www.stoko.com) |
| | STOKODERM (http://www.stoko.com) |
| | Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves: |
| | STOKO EMULSION (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 protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL GmbH in compliance with EN374. |
| | This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or |
| | chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de). |
| | Protective gloves |
| | 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 | Butyl rubber, BR |
| | Nitrile rubber, NBR |
| | 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. |
| Penetration time of glove material | Value for the permeation: Level \leq 6, 480 min |
| | The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. |
| • For the permanent contact gloves | |
| made of the following materials are suitable: | Butyl rubber, BR |
| As protection from splashes gloves | |
| made of the following materials are | |
| suitable: | Nitrile rubber, NBR |
| | Camatril (KCL, 730, 731, 732, 733) |
| Not suitable are gloves made of the following materials: | Leather gloves |
| the following materials. | Strong material gloves |
| Eye protection: | Goggles recommended during refilling |
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| SECTION 9: Physical and chemical properties | | | | |
|---|---|--|--|--|
| • 9.1 Information on basic physical and chemical properties | | | | |
| General Information | | | | |
| · Appearance: | | | | |
| Form: | Fluid | | | |
| <u>Colour:</u> · Odour: | Colourless Characteristic | | | |
| · Odour threshold: | Not determined. | | | |
| · pH-value at 20 °C: | 9 | | | |
| Change in condition Melting point/freezing point: Initial boiling point and boiling range | Undetermined. | | | |
| · Flash point: | Not applicable. | | | |
| · Flammability (solid, gas): | Not applicable. | | | |
| Decomposition temperature: | Not determined. | | | |
| Auto-ignition temperature: | Product is not selfigniting. | | | |
| Explosive properties: | Product does not present an explosion hazard. | | | |
| Explosion limits: | | | | |
| Lower: | Not determined. | | | |
| Upper: | Not determined. | | | |
| Vapour pressure at 20 °C: | 23 hPa | | | |
| Density at 20 °C: | 1 g/cm ³ | | | |
| <u>Relative density</u> | Not determined. | | | |
| · Vapour density · Evaporation rate | Not determined. Not determined. | | | |
| | Not determined. | | | |
| Solubility in / Miscibility with water: | Not miscible or difficult to mix. | | | |
| Partition coefficient: n-octanol/water: | Not determined. | | | |
| <u>Viscosity:</u> <u>Dynamic:</u> <u>Kinematic at 20 °C:</u> | Not determined. 11 s (DIN 53211/4) | | | |
| Solvent content: | | | | |
| Organic solvents: | 1.2 % | | | |
| Water: | 96.0 % | | | |
| · 9.2 Other information | No further relevant information available. | | | |
| SECTION 10: Stability and reactivity | | | | |
| <u>10.1 Reactivity</u> No <u>10.2 Chemical stability</u> Thermal decomposition (| o further relevant information available. | | | |



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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 REGULATION (EC) No 1907/2006 | |
|--|--|
| ANNEX XVII | Conditions of restriction: 3 |
| National regulations: | |
| \cdot Information about limitation of use: | Employment restrictions concerning juveniles must be observed. |
| Waterhazard class: <u>VOC EU</u> | Water hazard class 1 (Self-assessment): slightly hazardous for water. 12.0 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.

| <u>Relevant phrases</u> | H302 Harmful if swallowed. H318 Causes serious eye damage. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects. | |
|--|--|-------------------|
| Department issuing SDS: Contact: Abbreviations and acronyms: | Laboratory Dieter Zimmermann ADR: Accord européen sur le transport des marchandises dangereuses par R 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 | , i |
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| 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 vPvB: very Persistent and very Bioaccumulative Acute Tox. 4: Acute toxicity – Category 4 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic haza | 0, |
|---|--------------------------|
| LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Acute Tox. 4: Acute toxicity – Category 4 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 | ard – Category 3 GB – |