SECTION 1: Identification

1.1. GHS Product identifier

Trade name : Geberit DuoFresh

Type of product : Detergent

1.2 Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Sanitary cleaner

1.4. Supplier's details

Supplier

Geberit International AG
Schachenstrasse 77
CH-8645 Jona - Switzerland
T +41 (0) 55 221 63 00 - F +41 (0) 55 221 67 47
www.geberit.com

Email competent person

sds@kft.de

Importer

Geberit Plumbing Technology India Private Limited
At The Lalit Ashok
Kumara Krupa High Grounds
560 001 Bengaluru - INDIA
T +91 80 6828 1101 - F +91 80 6828 1133

Informing department

msds@geberit.com

1.5. Emergency phone number

Emergency number : National Poisons Information Centre
All India Institute of Medical Sciences Ansari Nagar
New Dehli
India

24hrs
Emergency number: +91 112 659 36 77 or +91 112 658 93 91

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (oral), Category 5	H303	Calculation method
Skin corrosion/irritation, Category 2	H315	Calculation method
Serious eye damage/eye irritation, Category 2A	H319	Expert judgment
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Calculation method
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412	Calculation method

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects : Toxic to aquatic life,May be harmful if swallowed,Causes skin irritation,Causes serious eye irritation,Harmful to aquatic life with long lasting effects.

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN) :



GHS07

Signal word (GHS UN) : Warning

Hazardous ingredients : Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts; Amides, coco, N-(hydroxyethyl)

Hazard statements (GHS UN)	:	H303 - May be harmful if swallowed H315 - Causes skin irritation H319 - Causes serious eye irritation H401 - Toxic to aquatic life H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS UN)	:	P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P264 - Wash hands thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER, a doctor if you feel unwell. P332+P313 - If skin irritation occurs: Get medical advice, medical attention. P337+P313 - If eye irritation persists: Get medical advice, medical attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P501 - Dispose of contents, container to a hazardous or special waste collection point.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts	(CAS-No.) 68411-30-3 (EC-No.) 270-115-0	>=25 - <50	Acute toxicity (oral), Category 4, H302 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Hazardous to the aquatic environment — Acute Hazard, Category 2, H401 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412
Amides, coco, N-(hydroxyethyl)	(CAS-No.) 90622-77-8	>=10 - <20	Acute toxicity (oral), Category 5, H303 Acute toxicity (dermal), Category 5, H313 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Hazardous to the aquatic environment — Acute Hazard, Category 2, H401

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	:	In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	:	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	:	Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Strong water jet.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Sulphur oxides. Nitrogen oxides. Metal oxides.

5.3. Special protective actions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid sub-soil penetration. Prevent entry to sewers and public waters.

6.3. Methods and materials for containment and cleaning up

For containment : No additional information available.
Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Other information : Disposal must be done according to official regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry protected location to prevent any moisture contact. Store in a well-ventilated place. Keep cool.
Information about storage in one common storage facility : Keep away from food, drink and animal feeding stuffs.

Maximum storage period : > 1 year(s)
Storage temperature : 10 - 30 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	:	Ensure good ventilation of the work station.
Environmental exposure controls	:	Avoid release to the environment.
Other information	:	Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection	:	Chemically resistant protective gloves. Nitrile rubber. EN 374. Gloves must be replaced after each use and whenever signs of wear or perforation appear
Eye protection	:	Wear closed safety glasses. EN 166
Skin and body protection	:	Wear suitable protective clothing. EN 340. EN 13034
Respiratory protection	:	Not necessary with sufficient ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Dust production: dust mask with filter type P2. EN 143. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust

8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Pens
Colour	:	Blue.
Odour	:	perfumed.
Odour threshold	:	Not available
Relative evaporation rate (butylacetate=1)	:	Not applicable
Melting point	:	Not available
Freezing point	:	Not applicable
Boiling point	:	Not available
Flammability (solid, gas)	:	No data available
Explosive limits	:	Not applicable
Lower explosive limit (LEL)	:	Not applicable
Upper explosive limit (UEL)	:	Not applicable
Flash point	:	> 100 °C
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	Not available
pH	:	6.5 - 8 (1 g/L; 20 °C)
pH solution	:	Not available
Viscosity, kinematic (calculated value) (40 °C)	:	Not applicable
Log Kow	:	Not available
Vapour pressure	:	Not applicable
Vapour pressure at 50 °C	:	Not available
Density	:	≈ 1.5 g/cm³ (20 °C)
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not applicable
Solubility	:	Soluble in water.
Viscosity, dynamic	:	Not applicable
Explosive properties	:	Product is not explosive
Oxidising properties	:	Non oxidizing

9.2. Data relevant with regard to physical hazard classes (supplemental)

UN Gap Test	:	No additional information available
Koenen Test	:	No additional information available
Limiting impact energy	:	No additional information available
Limiting load	:	No additional information available
Thermal stability	:	No additional information available
Oxidising power (OP)	:	No additional information available
Corrected burning rate (Ac)	:	No additional information available
Desensitizing agent	:	No additional information available
Exothermic decomposition energy	:	No additional information available
Tci	:	No additional information available
Fundamental burning velocity	:	No additional information available
Mass burning rate	:	No additional information available
Wetted zone pass	:	No additional information available
SADT	:	No additional information available
Decomposition energy	:	No additional information available
Detonation properties	:	No additional information available
Deflagration properties	:	No additional information available
Effect of heating under confinement	:	No additional information available
Explosive power	:	No additional information available
Spontaneous ignition	:	No additional information available
Pyrophoric properties over time	:	No additional information available
Emitted gas	:	No additional information available
Emitted gas ignition	:	No
Gas evolution rate	:	No additional information available
Corroded metals	:	No additional information available
Corrosion rate	:	No additional information available
Minimum ignition energy	:	No additional information available
Specific conductivity	:	No additional information available
Softening point	:	No additional information available
Sublimation point	:	No additional information available
Saturation concentration	:	No additional information available
Miscibility	:	No additional information available
VOC content	:	No additional information available
Fat solubility	:	No additional information available
Gas group	:	No additional information available
Refractive index	:	No additional information available
Bulk density	:	No additional information available
Other properties	:	No additional information available
Additional information	:	No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Do not allow water (or moist air) contact with this material.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : May be harmful if swallowed.

Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

ATE UN (oral)	3205 mg/kg bodyweight
ATE UN (dermal)	22522 mg/kg bodyweight

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts (68411-30-3)	
LD50 oral rat	1080 mg/kg (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

Amides, coco, N-(hydroxyethyl) (90622-77-8)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.
pH: 6.5 - 8 (1 g/L; 20 °C)

Serious eye damage/irritation : Causes serious eye irritation.
pH: 6.5 - 8 (1 g/L; 20 °C)

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Not relevant)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.

Classification procedure (Hazardous to the aquatic environment, short-term (acute)) : Calculation method

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Classification procedure (Hazardous to the aquatic environment, long-term (chronic)) : Calculation method

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts (68411-30-3)	
LC50 fish 1	1.67 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	2.9 mg/l (48 h; Daphnia magna; (OECD 202 method))

EC50 96h algae (1)	29 mg/l (Pseudokirchneriella subcapitata)
NOEC chronic fish	1 mg/l (28 d; Lepomis macrochirus; (OECD 204 method))

Amides, coco, N-(hydroxyethyl) (90622-77-8)	
LC50 fish 1	31 mg/l (96 h; Danio rerio; (OECD 203 method))

12.2. Persistence and degradability

Geberit DuoFresh	
Persistence and degradability	Contained surfactants are biodegradable.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts (68411-30-3)	
Persistence and degradability	Readily biodegradable.
Biodegradation	85 % (29 d; (OECD 301B method))

12.3. Bioaccumulative potential

Geberit DuoFresh	
Bioaccumulative potential	No additional information available.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts (68411-30-3)	
Log Kow	1.4 (23 °C; (OECD 123 method))
Bioaccumulative potential	Low bioaccumulation potential. (OECD 305 method).

Amides, coco, N-(hydroxyethyl) (90622-77-8)	
Log Kow	4.3 (25 °C)

12.4. Mobility in soil

Geberit DuoFresh	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

Other adverse effects : No additional information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Disposal must be done according to official regulations. Do not dispose of with domestic waste. Do not discharge into drains or the environment.

SECTION 14: Transport information

In accordance with IMDG / IATA / UN RTDG / RID / ADR

UN RTDG	IMDG	IATA	RID	ADR
14.1. UN number				
Not regulated for transport				

14.2. UN Proper Shipping Name				
Not applicable	Not applicable	Not applicable	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not regulated	Not regulated
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not regulated	Not regulated
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

- UN RTDG
No data available
- IMDG
No data available
- IATA
No data available
- RID
Not regulated
- ADR
Not regulated

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

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Abbreviations and acronyms : ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL - Derived Minimal Effect level
DNEL - Derived-No Effect Level
EC50 - Median effective concentration
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods
LC50 - Median lethal concentration
LD50 - Median lethal dose
LOAEL - Lowest Observed Adverse Effect Level
NOAEC - No-Observed Adverse Effect Concentration
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
OECD - Organisation for Economic Co-operation and Development
PBT - Persistent Bioaccumulative Toxic
PNEC - Predicted No-Effect Concentration
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS - Safety Data Sheet
STP - Sewage treatment plant
TLM - Median Tolerance Limit
vPvB - Very Persistent and Very Bioaccumulative

Full text of H-statements:	
H302	Harmful if swallowed
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

KFT SDS UN 00

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.