

according to UK REACH Regulation

| 166 Lavafix |
|-------------|
|-------------|

Revision date: 12.12.2022

Product code: c1660_sd

Page 1 of 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier 166 Lavafix UFI RFN0-N01H-T00H-8R3D 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the substance/mixture Product for professional cleaning and maintenance 1.3. Details of the supplier of the safety data sheet Company name: KAW KIEHL KG Street: Oskar-von-Miller-Str. 1 Place: D-85235 Odelzhausen Telephone: +49 8134 9305-40 Telefax: +49 8134 5145 E-mail: info@kiehl-group.com Contact person: Laboratory department www.kiehl-group.com Internet: Responsible Department: Notrufnummer für deutsch- und englischsprachige Länder: +49/89/19240 Vergiftungsinformationszentrale (VIZ) Österreich: +43 1 406 43 43 Nationale Notrufnummer für die Schweiz (Tox-Zentrum Zürich): 145 Numéro d'urgence France: INRS: +33 (0) 1 45 42 59 59 Numero d' emergenza Italia: Centro Antiveleni - 20162 Milano: 02/66101029 ETTSZ /Egészségügyi Toxikológiai Tájékoztató Szolgálat/, 1096 Budapest, Nagyvárad tér 2. Ügyeleti telefonszám: +36 80 201-199 Emergency telephone number for all other countries: +49/8134/9305-169 **KIEHL Austria GmbH** Perfektastr. 57; A-1230 Wien Tel. +43 (0) 1 / 604 99 93 **KIEHL FRANCE S.A.R.L.** 5. rue de Londres: F-67670 Mommenheim Tél. +33 (0) 3.88.59.52.25 KIEHL Italia s.r.l. Via San Rocco, 101; I-16036 Recco (GE) Tel. +39 / 0185 730 008 **KIEHL Schweiz AG** St. Dionys-Str. 33; CH-8645 Jona Tel. +41 (0) 55 / 254 74 74 KIEHL Hungary Kft. Felsőipari körút 3/ D HU-2142 Nagytarcsa Tel. +36 (0) 1 / 348-08 41 **KIEHL Middle East LLC** A8-LIU 48/49 - KIZAD Abu Dhabi, U.A.E. Tel. +971 2 550 33 96

1.4. Emergency telephone

+49/89/19240 (germanophone and anglophone)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Corr. 1B; H314

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Sodium Hydroxide

Signal word: Pictograms:





according to UK REACH Regulation

| | 166 Lavafix | |
|---------------------------|--|--------------|
| Revision date: 12.12.2022 | Product code: c1660_sd | Page 2 of 10 |
| Hazard statements | | |
| H314 | Causes severe skin burns and eye damage. | |
| Precautionary statemen | ts | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if | |

P308+P313 2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

F

Chemical characterization

according to 648/2004/CE: anionic surfactants 5-15%, EDTA <5%, alkalis, water-soluble solvents, corrosion inhibitors, dyes, fragrances

present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|-----------------------------------|---------------------------|------------------|------------|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulati | on) | | |
| 68439-57-6 | Olefinsulfonate-Na-salt | | | 5 - < 10 % |
| | 270-407-8 | | 01-2119513401-57 | |
| | Skin Irrit. 2, Eye Dam. 1; H315 H | 1318 | ÷ | |
| 1310-73-2 | Sodium hydroxide | | | 1 - < 5 % |
| | 215-185-5 | 011-002-00-6 | 02-2119752469-26 | |
| | Skin Corr. 1A; H314 | | | |
| 64-02-8 | tetrasodium ethylene diamine te | traacetate | | 1 - < 5 % |
| | 200-573-9 | 607-428-00-2 | 01-2119486762-27 | |
| | Acute Tox. 4, Acute Tox. 4, Eye | Dam. 1, STOT RE 2; H332 I | H302 H318 H373 | |
| 112-34-5 | 2-(2-Butoxyethoxy)ethanol | | | 1 - < 5 % |
| | 203-961-6 | 603-096-00-8 | 01-2119475104-44 | |
| | Eye Irrit. 2; H319 | | | |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|------------|--------------------------|--|------------|
| | Specific Conc. | Limits, M-factors and ATE | |
| 68439-57-6 | 270-407-8 | Olefinsulfonate-Na-salt | 5 - < 10 % |
| | Skin Irrit. 2; H3 | 15: >= 5 - 100 Eye Dam. 1; H318: >= 38 - 100 Eye Irrit. 2; H319: >= 5 - < 38 | |
| 1310-73-2 | 215-185-5 | Sodium hydroxide | 1 - < 5 % |
| | · · · · | H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < H319: >= 0,5 - < 2 | |
| 64-02-8 | 200-573-9 | tetrasodium ethylene diamine tetraacetate | 1 - < 5 % |
| | inhalation: ATI mg/kg | E = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: ATE = 500 | |

SECTION 4: First aid measures

4.1. Description of first aid measures



Page 3 of 10

Safety Data Sheet

according to UK REACH Regulation

166 Lavafix Product code: c1660 sd

Revision date: 12.12.2022

General information

Avoid contact with skin and eyes.

After inhalation

not hazardous by inhalation

After contact with skin

Wash off immediately with soap and plenty of water. Take off all contaminated clothing immediately.

After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

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

This information is not available.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Any extinguishing means and measures are acceptable.

5.2. Special hazards arising from the substance or mixture

This information is not available.

5.3. Advice for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid contact with skin, eyes and clothing.

For non-emergency personnel

Use personal protection equipment.

For emergency responders

Use personal protection equipment.

6.2. Environmental precautions

Do not flush into surface water.

6.3. Methods and material for containment and cleaning up

For containment

Stop leak if safe to do so. Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

Clean contaminated articles and floor according to the environmental legislation.

Other information

Never return spills in original containers for re-use.

6.4. Reference to other sections

Refer to protective measures listed in sections 7 and 8.



166 Lavafix

according to UK REACH Regulation

Revision date: 12.12.2022

Product code: c1660_sd

Page 4 of 10

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes.

Advice on protection against fire and explosion No special protective measures against fire required.

Advice on general occupational hygiene

General industrial hygiene practice.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store at room temperature in the original container. Store in a place accessible by authorized persons only.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs. Do not store near acids.

Further information on storage conditions

Keep container tightly closed.

Never return unused material to storage receptacle.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|-----------|---------------------------|-----|-------|-----------|---------------|--------|
| 112-34-5 | 2-(2-Butoxyethoxy)ethanol | 10 | 67.5 | | TWA (8 h) | WEL |
| | | 15 | 101.2 | | STEL (15 min) | WEL |
| 1310-73-2 | Sodium hydroxide | - | 2 | | STEL (15 min) | WEL |

8.2. Exposure controls

Appropriate engineering controls

Not required.

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166

Hand protection

Protective gloves

Recommendation: Nitrile gloves with a coating thickness of 0.4 mm which protect at least 8 hours (corresponds to the permeability level 6 of the European norm DIN/EN 374) and provide a resistance to swelling of < 15%.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Not required

Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice.



according to UK REACH Regulation

166 Lavafix

Revision date: 12.12.2022

Product code: c1660_sd

Page 5 of 10

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state: | liquid | | |
|---|------------------------------|---------------------|-------------|
| Colour: Odour: | orange-red characteristic | | |
| | | | Test method |
| Melting point/freezing point: | | <0 °C | |
| Boiling point or initial boiling point and | | >98 °C | |
| boiling range: | | | |
| Flammability: | | not applicable | |
| Lower explosion limits: | | not applicable | |
| Upper explosion limits: | | not applicable | |
| Flash point: | | >100 °C | |
| Auto-ignition temperature: | | not determined | |
| Decomposition temperature: | | not determined | |
| pH-Value (at 20 °C): | | > 13,5 | K-QP1012C |
| Viscosity / kinematic: | | not determined | |
| Water solubility: (at 20 °C) | | completely miscible | |
| Solubility in other solvents | | | |
| not determined | | | |
| Partition coefficient n-octanol/water: | | not determined | |
| Vapour pressure: | | not determined | |
| Density (at 20 °C): Relative vapour density: | | not determined | K-QP1012E |
| Particle characteristics: | | not applicable | |
| | | not applicable | |
| 9.2. Other information | | | |
| Information with regard to physical haza | ard classes | | |
| Explosive properties Not explosive | | | |
| Self-ignition temperature | | | |
| Solid: | | not applicable | |
| Gas: | | not applicable | |
| Oxidizing properties | | | |
| Not relevant | | | |
| Other safety characteristics | | | |
| Evaporation rate: | | not determined | |
| Solid content: | | not determined | |
| Sublimation point: | | not applicable | |
| Softening point: | | not applicable | |
| Pour point: | | not applicable | |
| Viscosity / dynamic: | | not determined | |
| Flow time: | | not determined | |

SECTION 10: Stability and reactivity

10.1. Reactivity

This information is not available.

10.2. Chemical stability

This information is not available.



according to UK REACH Regulation

166 Lavafix

Revision date: 12.12.2022

Product code: c1660_sd

Page 6 of 10

10.3. Possibility of hazardous reactions

This information is not available.

10.4. Conditions to avoid

Do not expose to temperatures above 35 °C.

10.5. Incompatible materials

This information is not available.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

Do not mix with other detergents or chemicals.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

| CAS No | Chemical name | | | | |
|---------|---------------------------|-------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 64-02-8 | tetrasodium ethylene diar | nine tetraacetate | | | |
| | oral | ATE 500 mg/kg | | | |
| | inhalation vapour | ATE 11 mg/l | | | |
| | inhalation dust/mist | ATE 1,5 mg/l | | | |

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

This information is not available.

Further information

Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability



according to UK REACH Regulation

166 Lavafix

Revision date: 12.12.2022

Product code: c1660_sd

Page 7 of 10

The surfactants in the product meet all requirements of the detergents regulation 648/2004/EC.

12.3. Bioaccumulative potential

This information is not available.

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

This information is not available.

Further information

070699

Chemical Oxygen Demand (COD): 323mg O2/g

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not dispose of waste into sewer.

List of Wastes Code - residues/unused products

WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

List of Wastes Code - used product

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Clean container with water. Return cleaned containers to the company for recycling. Offer rinsed packaging material to local recycling facilities.

SECTION 14: Transport information

Land transport (ADR/RID)

| 14.1. UN number or ID number: | UN 1824 |
|-----------------------------------|---------------------------|
| 14.2. UN proper shipping name: | SODIUM HYDROXIDE SOLUTION |
| 14.3. Transport hazard class(es): | 8 |
| 14.4. Packing group: | III |
| Hazard label: | 8 |
| | B |
| Classification code: | C5 |
| Limited quantity: | 5 L |
| Excepted quantity: | E1 |
| Transport category: | 3 |
| Hazard No: | 80 |
| Tunnel restriction code: | E |
| Inland waterways transport (ADN) | |
| 14.1. UN number or ID number: | UN 1824 |
| 14.2. UN proper shipping name: | SODIUM HYDROXIDE SOLUTION |
| 14.3. Transport hazard class(es): | 8 |



according to UK REACH Regulation

| Revision date: 12.12.2022 | Product code: c1660_sd | Page 8 of |
|--|---|-----------|
| | | Fage o of |
| <u>14.4. Packing group:</u> Hazard label: | | |
| | 8 | |
| | | |
| | 8 | |
| Classification code: | C5 | |
| Limited quantity: | 5 L | |
| Excepted quantity: | E1 | |
| /larine transport (IMDG) | | |
| 14.1. UN number or ID number: | UN 1824 | |
| 14.2. UN proper shipping name: | SODIUM HYDROXIDE, SOLUTION | |
| 14.3. Transport hazard class(es): | 8 | |
| <u>14.4. Packing group:</u> Hazard label: | 8 | |
| | | |
| | | |
| | 8 | |
| Special Provisions: | 223 | |
| Limited quantity: | 5 L | |
| Excepted quantity: | E1 | |
| EmS: | F-A, S-B | |
| Segregation group: | alkalis | |
| 14.5. Environmental hazards | | |
| ENVIRONMENTALLY HAZARDOUS: | No | |
| 14.6. Special precautions for user | | |
| Not required 14.7. Maritime transport in bulk according | to IMO instruments | |
| not applicable | | |
| | | |
| SECTION 15: Regulatory information | | |
| 5.1. Safety, health and environmental re | gulations/legislation specific for the substance or mixture | |
| EU regulatory information | | |
| Restrictions on use (REACH, annex XV | I): | |
| Entry 3, Entry 55, Entry 75 | | |
| National regulatory information | | |
| Water hazard class (D): | 2 - obviously hazardous to water | |
| 15.2. Chemical safety assessment | | |
| | bstances in this mixture were not carried out. | |

Changes

This data sheet contains changes from the previous version in section(s): 3 / 6 / 7 / 8 / 12



according to UK REACH Regulation

166 Lavafix

Revision date: 12.12.2022

Product code: c1660_sd

Page 9 of 10

Abbreviations and acronyms ADR: Accord européen sur le transport 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 Harmonized 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 LC50: Lethal concentration, 50% LD50: Lethal dose, 50% CLP: Classification, labelling and Packaging REACH: Registration. Evaluation and Authorization of Chemicals GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals UN: United Nations DNEL: Derived No Effect Level DMFL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50% EC50: Effective Concentration 50% ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration BCF: Bio-concentration factor PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative RID: Regulations concerning the international carriage of dangerous goods by rail ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures) EmS: Emergency Schedules MFAG: Medical First Aid Guide MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu Acute Tox: Acute toxicity Skin Corr: Skin corrosion Skin Irrit: Skin irritation Eye Dam: Eye damage Eye Irrit: Eye irritation

STOT RE: Specific target organ toxicity - repeated exposure

Classification for mixtures and used evaluation method according to GB CLP Regulation

| Classification | Classification procedure |
|---------------------|--------------------------|
| Skin Corr. 1B; H314 | Calculation method |

Relevant H and EUH statements (number and full text)

| H302 | Harmful if swallowed. |
|------|--|
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| | |



according to UK REACH Regulation

| 166 Lavafix | | | |
|---------------------------|--|---------------|--|
| Revision date: 12.12.2022 | Product code: c1660_sd | Page 10 of 10 | |
| H373 | May cause damage to organs (Respiratory system) through prolonged or repeated exposure if inhaled. | | |

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)