

REKAL

SAFETY DATA SHEET

Rekolex FL-10

SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II-EU

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

Date issued 12.03.2012
Revision date 26.02.2015

1.1. Product identifier

Product name Rekolex FL-10
Article no. 12810 12814 12816 12817

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

Function Description: Detergent
Use of the substance/preparation Laundry Cleaner
Institutional laundries, for automatic dispensing systems.
Relevant identified uses SU22 Professional uses: publicly accessible (administration, education, entertainment, services, craftsmen)
PC35 Washing and cleaning products (including solvent based products)
PROC2 Use in closed, continuous process with occasional controlled exposure

1.3. Details of the supplier of the safety data sheet

Company name Rekal Svenska AB
Postcode 64621
City Gnesta
Country Sverige

Downstream user

Company name Rekal Svenska AB
Postal address Box 2
Postcode SE-646 21
City Gnesta
Country Sweden
Tel +46 158 339 00
Fax +46 158 369 48
E-mail lab@rekal.se

Website	www.rekal.se
Enterprise no.	556290-3871
Contact person	Anders G Pettersson

1.4. Emergency telephone number

Emergency telephone	Tel: 112 or +46 (0)8 331231 Description: In Sweden: Swedish Poisons Information Centre / Giftinformationscentralen www.giftinformation.se – Abroad: Contact nearest hospital or medical advisory center
Identification comments	In case of chemical accident: call national emergency Telephone number 112.

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to 67/548/EEC or 1999/45/EC	C; R35
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Corr 1A; H314 Eye Dam. 1; H318

2.2. Label elements

Hazard Pictograms (CLP)



Composition on the label	Sodium hydroxide (NaOH) 15 – 30 %
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage. H318 Causes Serious eye damage.
Precautionary statements	P102 Keep out of reach of children. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician.

2.3. Other hazards

Description of hazard	Causes severe burns. Risk of serious damage to eyes. No particular fire or explosion hazard.
Health effect	Corrosive to skin and eyes.
Environmental effects	Classification: The product presents no particular risk to the environment. This product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
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Sodium hydroxide (NaOH)	CAS no.: 1310-73-2 EC no.: 215-185-5 Index no.: 011-002-00-6 REACH Reg. No.: 01-21194-57892-27-XXXX Synonyms for section 3: Sodium hydroxide, respirable dust	C; R35 Skin Corr 1A; H314 Met. Corr. 1; H290	15 – 30 %
Description of the mixture	The product is a water solution.		
Substance comments	The full text for all hazard statements is displayed in section 16.		

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Always seek medical advice if any ill effects occur or there are persistent symptoms. Never give anything by mouth to an unconscious person. If possible, show this SDS or the label to the medical personal .
Inhalation	Move into fresh air and keep at rest. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Skin contact	Rinse and wash with plenty of water. Take off all contaminated clothing. Chemical burns must be treated by a physician.
Eye contact	Important! Rinse the eyes immediately with plenty of temperate water (20-30°C) for at least 15 minutes. Keep the eyes wide open. Seek medical advice immediately . Equipment for immediate rinsing of the eyes shall be available at the working place. Continue rinsing during transport.
Ingestion	Rinse mouth with water. Do not induce vomiting. Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Seek medical advice if more than a small quantity has been ingested or if illness or other symptoms occur.
Recommended personal protective equipment for first aid responders	No recommendation given.

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

Information for health personnel	Treat Symptomatically.
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4.3. Indication of any immediate medical attention and special treatment needed

Other Information	No recommendation given.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
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5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	This product is not flammable.
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5.3. Advice for firefighters

Fire fighting procedures	No recommendation given.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Emergency procedures No recommendation given.

6.1.2. For emergency responders

For emergency responders No recommendation given.

6.2. Environmental precautions

Environmental precautionary measures Prevent large quantities entering drains, groundwater, surface waters or soil.
Contact local authorities in case of spillage to drain/aquatic environment.

6.3. Methods and material for containment and cleaning up

Clean up Small quantities can be washed away with plenty of water. Large quantities are to be contained in sand or absorbent material and transferred to container for disposal or recovery in accordance with local regulations.

6.4. Reference to other sections

Other instructions Individual protection measures, such as personal protective equipment: see section 8.
Waste treatment methods: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling Work practice should minimize contact. Avoid contact with skin and eyes. Always follow the directions for use of the product.

Protective Safety Measures

Advice on general occupational hygiene First-aid equipment, including eye wash bottle, must be available at the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage Keep in original container. The original package gives a shelf life of at least 30 months.
Keep out of reach of children.

7.3. Specific end use(s)

Specific use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Substance	Identification	Value	TWA Year
Sodium hydroxide (NaOH)	CAS no.: 1310-73-2	TWA (8h): 1 mg/m ³	TWA Year: 2007
	EC no.: 215-185-5	TWA (8h): 1 mg/m ³	

Substance	Index no.: 011-002-00-6	OEL Short Term Value
	REACH Reg. No.: 01-21194-57892-27-XXXX	Value: 2 mg/m ³
DNEL	Synonyms for section 3: Sodium hydroxide, respirable dust	
	Sodium hydroxide (NaOH)	
	Group: Worker	
	Route of exposure: Short term (acute) – Inhalation – Local effect	
	Value: 1 mg/m ³	
	Group: Consumer	
	Route of exposure: Long term (repeated) – Inhalation – Local effect	
	Value: 1 mg/m ³	

DNEL / PNEC

Summary of risk management measures, human No recommendation given.

Summary of risk management measures, environment No recommendation given.

8.2. Exposure controls

Limitation of exposure on workplace An eye wash bottle must be available at the work site.

Safety signs



Respiratory protection

Respiratory protection No specific recommendations.

Hand protection

Suitable gloves type Use protective gloves made of: Nitrile. Polyvinyl chloride (PVC).

Eye / face protection

Eye protection Use approved safety goggles or face shield.

Skin protection

Skin protection (except hands) Wear appropriate clothing to prevent reasonably probable skin contact.

Appropriate environmental exposure control

Environmental exposure controls No recommendation given.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.

Colour	Colourless to pale yellow.
Odour	No characteristic odour.
pH	Status: In delivery state Value: ~ 14,00 Status: In aqueous solution Value: ~ 11,00 Comments: ca 0,1%
Melting point / melting range	Value: ~ -5 °C
Boiling point / boiling range	Value: ~ 100,00 °C
Flash point	Comments: Not determined.
Evaporation rate	Comments: Not determined.
Flammability (solid, gas)	Not relevant.
Explosion limit	Comments: Not determined.
Vapour pressure	Comments: Not determined.
Specific gravity	Value: 1375 kg/m ³ @20 °C
Solubility in water	Not entered.
Partition coefficient: n-octanol/water	Comments: Not determined.
Spontaneous combustability	Comments: Not determined.
Decomposition temperature	Comments: Not determined.
Viscosity	Comments: Not determined.
Oxidising properties	Not determined.

9.2. Other information

Physical hazards

Odour limit	Not determined.
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Other physical and chemical properties

Comments	No recommendation given.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no anticipated hazardous decomposition products associated with this material.
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10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No information required.
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10.4. Conditions to avoid

Conditions to avoid	The solution is strongly alkaline and reacts with strong acids with heat generation. In contact with metals generates hydrogen gas, which together with air can form explosive mixtures.
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10.5. Incompatible materials

Materials to avoid	Will corrode copper, zinc, aluminium and their alloys.
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10.6. Hazardous decomposition products

Hazardous decomposition products	No hazardous decomposition products.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological data for substances

Substance	Sodium hydroxide (NaOH)
Acute toxicity	<p>Type of toxicity: Acute Effect Tested: LD50 Route of exposure: Oral Value: Comments: No data available.</p> <p>Type of toxicity: Acute Effect Tested: LD50 Route of exposure: Dermal Value: Comments: No data available.</p> <p>Type of toxicity: Acute Effect Tested: LC50 Route of exposure: Inhalation. Value: Comments: No data available.</p>
Inhalation	<p>Dust is corrosive.</p> <p>Inhalation of aerosols can cause pain in mouth and throat, coughing and at high concentrations breathing difficulties.</p>
Skin contact	Burning pain and severe corrosive skin damage.
Eye contact	Strongly corrosive. Causes severe burns and serious eye damage. Immediate first aid is imperative.
Ingestion	<p>Corrosive.</p> <p>May cause severe smarting pain , corrosive burns, chest pain, vomiting and possibly shock. Even ingestion of a small quantity may cause burns. Risk of slow-healing painful burns in aesophagus.</p>
Mutagenicity	No known chronic or acute health risks.
Carcinogenicity	No known chronic or acute health risks.
Reproductive toxicity	No known chronic or acute health risks.
STOT-single exposure	None.
STOT-repeated exposure	None.

Other information regarding health hazards

General	Toxicological information not available for the product, only for the components. Corrosive.
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Acute toxicity, Mixture estimate

Oral	Toxicological information not available for the product, only for the components.
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Potential acute effects

Inhalation	Vapours and spray mist may irritate throat and respiratory system and cause coughing.
Skin contact	Burning pain and severe corrosive skin damage. Skin contact may cause pain, redness, blisters and chemical burns. Also diluted solutions of the product may cause damage.
Eye contact	Strongly corrosive. Causes severe burns. Immediate first aid is imperative. Vapour or spray may cause eye damage, impaired sight or blindness.
Ingestion	Corrosive. Even small amounts may cause serious damage. Risk of corrosion in the throat, the oesophagus and the stomach as well as shock.
Aspiration hazard	No known chronic or acute health risks.

Delayed effects / repeated exposure

Sensitisation	No known chronic or acute health risks.
STOT-single exposure	No known chronic or acute health risks.
STOT-repeated exposure	No known chronic or acute health risks.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity	No known chronic or acute health risks.
Mutagenicity	No known chronic or acute health risks.
Teratogenic properties	No known chronic or acute health risks.
Reproductive toxicity	No known chronic or acute health risks.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	Ecotoxicological information not available for the product, only for the components. Not classified as dangerous to the environment. May lead to a local change in acidity in the aquatic environment which may have adverse effects on aquatic organisms. The product is free from phosphates.
Aquatic, comments	Data lacking.

12.2. Persistence and degradability

Substance	Sodium hydroxide (NaOH)
Aquatic, comments	Aquatic toxicity is merely pH-dependant.
Biodegradability	Comments: Not applicable.
Chemical oxygen demand (COD)	Comments: Not applicable.

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation: Is not expected to be bioaccumulable.

12.4. Mobility in soil

Water solubility Comments: Not entered.

12.5. Results of PBT and vPvB assessment

PBT assessment results This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Environmental details, summation No recommendation given.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction. Recover and reclaim or recycle, if practical. Product residues are not harmful to the environment.

Product classified as hazardous waste Yes

Packaging classified as hazardous waste No

EWC waste code EWC: 200115 alkalines

Other Information Used cleaning solution in normal use concentration can be let out in ordinary sewer system. Empty, cleaned containers can be recycled or incinerated according to local legislation.

SECTION 14: Transport information

14.1. UN number

ADR / RID / ADN 1824

IMDG 1824

ICAO/IATA 1824

14.2. UN proper shipping name

ADR / RID / ADN SODIUM HYDROXIDE SOLUTION

IMDG SODIUM HYDROXIDE SOLUTION

ICAO/IATA SODIUM HYDROXIDE SOLUTION

14.3. Transport hazard class(es)

ADR / RID / ADN 8

Hazard no. 80

RID 8

IMDG 8

ICAO/IATA 8

14.4. Packing group

RID	II
IMDG	II
ICAO/IATA	II

14.5. Environmental hazards

Comments The product is assessed and classified as "no environmental hazard".

14.6. Special precautions for user

EmS	F-A, S-B
Special safety precautions for user	Tunnel restriction code: (E)

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

Additional information.

Additional information. Not relevant.

SECTION 15: Regulatory information

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

EEC-directive	<p>Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.</p> <p>The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.</p>
Legislation and regulations	<p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.</p> <p>Content according to Regulation (EC) No 648/2004: 5-15% polycarboxylates,</p> <p>The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).</p> <p>Safety Data Sheet (SDS) according to commission regulation (EU) no 453/2010 annex I.</p>

15.2. Chemical safety assessment

Chemical safety assessment performed	No
CSR required	No

SECTION 16: Other information

Supplier's notes The information on this data sheet represents our current data and is reliable provided that the

	product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Corr 1A; H314; Eye Dam. 1; H318;
List of relevant R-phrases (under headings 2 and 3).	R35 Causes severe burns.
List of relevant H-phrases (Section 2 and 3).	H318 Causes Serious eye damage. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.
Additional information	For restrictions on use see section 15. The user must be instructed in the proper work procedure and be familiar with the contents of these instructions. The product is free from phosphates.
Information which has been added, deleted or revised	Changes in the following sections: 1, 2, 3, 4, 8, 11.
Prepared by	Sara Nilsson