

SAFETY DATA SHEET

REKAL**Rekolex FL-30**

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 24.08.2012
Revision date 26.02.2015

1.1. Product identifier

Product name Rekolex FL-30
Article no. 12830 12838 12840

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

Function Description: Liquid Detergent
Product group Laundry Cleaner
Use of the substance / preparation 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
Uses advised against Not for manual dispensing.

1.3. Details of the supplier of the safety data sheet**Downstream user**

Company name Rekal Svenska AB
Postal address Box 2
Postcode SE-646 21
City Gnesta
Country Sweden
Telephone number +46 158 339 00
Fax +46 158 369 48
Email lab@rekal.se
Website www.rekal.se

Enterprise No.	556290-3871
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1.4. Emergency telephone number

Emergency telephone	Telephone number: 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	Xi; R41
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Dam. 1; H318 Skin Irrit. 2; H315

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label	Alcholethoxylate 1 – 10 %, Alkylalcholethoxylate propoxylate benzyl ether 1 – 10 %, Quaternary C12-14 alkyl methyl amine ethoxylate, methyl chloride 1 – 5 %, Talgalkylbis(2-hydroxietyl)aminoxid 1 – 5 %
Signal word	Danger
Hazard statements	H318 Causes Serious eye damage. H315 Causes skin irritation.
Precautionary statements	P102 Keep out of reach of children. 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.
Supplemental label information	P280 Wear protective gloves and eye protection/face protection.

2.3. Other hazards

PBT / vPvB	This product does not contain any PBT or vPvB substances.
Description of hazard	No particular fire or explosion hazard.
Environmental effects	Classification: The product presents no particular risk to the environment.
Other hazards	No recommendation given.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Alcholethoxylate	CAS No.: 68439-46-3	Xn, Xi; R22, R41	1 – 10 %

	EC No.: polymer	Eye Dam. 1; H318 Acute tox. 4; H302 Note : No OEL.	
Alkylalcoholethoxylate propoxylate benzyl ether	CAS No.: 68154-99-4 EC No.: polymer	Xi; R38,R41 Skin Irrit. 2; H315 Eye Dam. 1; H318	1 – 10 %
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6	F; R11 Flam. Liq. 2; H225	1 – 5 %
Quaternary C12-14 alkyl methyl amine ethoxylate, methyl chloride	CAS No.: 863679-20-3	Xn; R22,R38,R41 Acute tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318	1 – 5 %
Talgalkylbis(2-hydroxietyl)aminoxid	CAS No.: 61791-46-6 EC No.: 263-179-6	C; R34 N; R50 Skin Corr 1C; H314 Aquatic Acute 1; H400	1 – 5 %
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	Fresh air.
Skin contact	Rinse and wash with plenty of water. Take off all contaminated clothing.
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 avialiable at the working place. Continue rinsing during transport. Seek medical advice.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Do not induce vomiting. 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

Separate first aid equipment	Eyewash bottle with clean water.
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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.
Improper extinguishing media	—

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	This product is not flammable.
Hazardous combustion products	No recommendation given.

5.3. Advice for firefighters

Fire fighting procedures	No specific fire fighting procedure given.
Other information	No recommendation given.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Avoid contact with skin and eyes. Wear necessary protective equipment.
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6.1.1. For non-emergency personnel

Personal precautions	No recommendation given.
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6.1.2. For emergency responders

For emergency responders	No recommendation given.
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6.2. Environmental precautions

Environmental precautionary measures	Prevent large quantities entering drains, groundwater, surface waters or soil.
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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. Inform the local authorities.
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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.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Avoid contact with skin and eyes. Handle in accordance with good occupational hygiene and safety practices. Avoid repeated or long contact with unprotected skin. Always follow
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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.

Other Information

Keep out of reach of children.

Conditions for safe storage

Storage stabilit

The original package gives a shelf life of at least 30 months.

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
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6	TWA (8h): 500 ppm TWA (8h): 1000 mg/m ³ OEL short term value Value: 1000 ppm OEL short term value Value: 1900 mg/m ³	TWA Year: 1993

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

Equipment for immediate rinsing of the eyes shall be available at the workplace in case of risk of splashes from the product.

Safety signs



Respiratory protection

Respiratory protection

Respiratory protection not required.

Hand protection

Hand protection	Use protective gloves.
Suitable gloves type	Neoprene, nitrile, polyethylene or PVC.

Eye / face protection

Eye protection	Use approved safety goggles or face shield.
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Skin protection

Skin protection (except hands)	No special precautions.
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Appropriate environmental exposure control

Environmental exposure controls	No recommendation given.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Sweetish.
Odour limit	Comments: Not determined
pH	Status: In delivery state Value: ~ 9,5 Status: In aqueous solution Value: ~ 9
Melting point / melting range	Value: 0 °C
Boiling point / boiling range	Value: ~ 100,00 °C
Flash point	Comments: Non-flammable.
Evaporation rate	Comments: Not determined.
Flammability (solid, gas)	Not relevant.
Explosion limit	Comments: Not explosive.
Vapour pressure	Comments: Not determined.
Vapour density	Comments: Not determined.
Specific gravity	Value: 1025 kg/m ³ Temperature: 20 °C
Solubility description	Soluble in water.
Partition coefficient: n-octanol/water	Comments: Not determined.
Spontaneous combustability	Comments: Not determined.
Decomposition temperature	Comments: Not determined.
Viscosity	Comments: Not determined.

Oxidising properties Does not meet the criteria for oxidising.

9.2. Other information

Other physical and chemical properties

Comments Information given concerns the concentrated solution.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No information required.

10.4. Conditions to avoid

Conditions to avoid No information required.

10.5. Incompatible materials

Materials to avoid No incompatible groups noted.

10.6. Hazardous decomposition products

Hazardous decomposition products No hazardous decomposition products.

Other information

Other information No recommendation given.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological data for substances

Substance Alcoholethoxylate

Acute toxicity
Type of toxicity: Acute
Effect tested: LD50
Route of exposure: Oral
Value: ~ 300-2000 mg/kg
Animal test species: rattus
Comments: The value is estimated from tests on similar products.

	<p>Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Duration: 4h Value: > 20,1 mg/l Animal test species: rattus</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: > 2000-5000 mg/kg bw</p>
Other toxicological data	NOAEL : 250mg/kg bw repeated administration Specific target organ toxicity – repeated exposure: NOAEL 250mg/kg bw
Ingestion	Acute oral toxicity : LD50: 300,1 – 2 000 mg/kg (Rat) NOEL: 250mg/kg
Skin corrosion / irritation	Result: No skin irritation
Serious eye damage / irritation	May cause irreversible eye damage.
Respiratory or skin sensitisation	Result: Not sensitizing.
Mutagenicity	Result: negative
Carcinogenicity, other information	Result: negative
STOT-repeated exposure	NOEL: 250mg/kg
Substance	Alkylalcholethoxylate propoxylate benzyl ether
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: 2414 mg/kg Animal test species: Rattus</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: > 2000 mg/kg Animal test species: Rabbit</p> <p>Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Duration: 1h Value: > 7,1 mg/l Animal test species: Rattus</p>
Skin contact	Irritating.
Eye contact	Causes serious eye damage.
Substance	Quaternary C12-14 alkyl methyl amine ethoxylate, methyl chloride
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50</p>

	<p>Route of exposure: Oral Value: > 300-2000 mg/kg Animal test species: Rattus</p>
Skin contact	Irritating.
Eye contact	Risk of serious damage to eyes.
Respiratory or skin sensitisation	Not sensitising.
Carcinogenicity, other information	Genotoxicity in vitro: negative

Other information regarding health hazards

General	Toxicological information not available for the product, only for the components.
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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	No specific health warnings noted.
Skin contact	Irritating to skin.
Eye contact	Corrosive. Immediate first aid is necessary.
Ingestion	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
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, other information	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. The product is free from phosphates.
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12.2. Persistence and degradability

Substance	Alcholethoxylate
Acute aquatic, fish	Value: ~ 1,1-10 mg/l Test duration: 96h Species: fish Method: LC50
Acute aquatic, algae	Value: ~ 1,1-10 mg/l Test duration: 48h Species: Skeletonema costatum Method: EC50
Acute aquatic, Daphnia	Value: ~ 1,1-10 mg/l Test duration: 48h Species: Daphnia magna Method: EC50
Aquatic, comments	active sludge / micro organisms: EC50 410mg/l exposure time 4h, Species: Nitrifying bacteria
Biodegradability	Value: > 60% CO2 Method: OECD301B Test period: 28d
PBT assessment results	Not a PBT substance.
Substance	Alkylalcholethoxylate propoxylate benzyl ether
Acute aquatic, Daphnia	Value: 6,3 mg/l Test duration: 48h Species: Daphnia magna Method: EC50
Aquatic, comments	IC50 (bacteria), 16h: 4900mg/l
Biodegradability	Value: > 60 % Method: OECD 301B, 301F Test period: 28d
PBT assessment results	This substance is not classified as PBT or vPvB.
Substance	Ethanol
Acute aquatic, fish	Value: 13480 mg/l Test duration: 96h Species: Pimphales promelas Method: LC 50 (OECD 203)
Acute aquatic, algae	Value: 5000 mg/l Test duration: 72h Species: Scenedesmus sp. Method: IC50
Acute aquatic, Daphnia	Value: 7800 mg/l Test duration: 48h Method: EC50
Substance	Quaternary C12-14 alkyl methyl amine ethoxylate, methyl chloride
Acute aquatic, fish	Value: > 10 -100mg/l

	<p>Test duration: 96h Method: LC50</p>
Acute aquatic, algae	<p>Value: > 1 -10mg/l Test duration: 72h Method: EC50</p>
Acute aquatic, Daphnia	<p>Value: > 1 -10mg/l Test duration: 48h Method: EC50</p>
Biodegradability	<p>Value: > 60 % BOD Method: OECD 301D Test period: 28d</p>
PBT assessment results	This substance is not classified as PBT or vPvB.
Persistence and degradability, comments	All organic components are considered biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential	Bioaccumulation: Is not expected to be bioaccumulable.
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12.4. Mobility in soil

Mobility	Not entered.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	This product does not contain any PBT or vPvB substances.
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12.6. Other adverse effects

Other adverse effects, comments	No recommendation given.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Recover and reclaim or recycle, if practical. Small amounts may be flushed with water to sewer. Larger volumes must be sent to approved plant for destruction. Product residues are not harmful to the environment.
Product classified as hazardous waste	Yes
Packaging classified as hazardous waste	No
EWC waste code	EWC: 200129 detergents containing dangerous substances
Other information	When handling waste, consideration should be made to the safety precautions applying to handling of the product. 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

Comments	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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14.2. UN proper shipping name

Comments	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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14.3. Transport hazard class(es)

Comments	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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14.4. Packing group

Comments	Not relevant.
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14.5. Environmental hazards

Comments	The product is assessed and classified as "no environmental hazard".
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14.6. Special precautions for user

Special safety precautions for user	Not relevant.
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14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Product name	—
Ship type required	—
Pollution category	—

Additional information

Additional information	No other information noted.
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SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture**

EEC-directive	Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
Legislation and regulations	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.

Content according to Regulation (EC) No 648/2004: 15-30% non-ionic surfactants, <5% cationic surfactants, soap,

The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).
 Safety Data Sheet (SDS) according to commission regulation (EU) no 453/2010 annex I.

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 Irrit. 2; H315; Eye Dam. 1; H318;
List of relevant R-phrases (under headings 2 and 3).	R50 Very toxic to aquatic organisms. R11 Highly flammable. R41 Risk of serious damage to eyes. R38 Irritating to skin. R34 Causes burns. R22 Harmful if swallowed.
List of relevant H-phrases (Section 2 and 3)	H318 Causes Serious eye damage. H302 Harmful if swallowed. H400 Very toxic to aquatic life. H315 Causes skin irritation. H314 Causes severe skin burns and eye damage. H225 Highly flammable liquid and vapour.
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.
Information added, deleted or revised	Changes in the following sections: 1, 2, 3, 4, 8, 11.
Prepared by	Sara Nilsson