

## ROKAnol® LP27

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

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

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#### 1.1 Product identifier

Product name : ROKAnol® LP27  
Chemical name : Alcohols, C12-14, ethoxylated propoxylated  
EC number : Polymer  
REACH Registration number : Exempt from REACH: Polymer.  
CAS number : 68439-51-0  
Other means of identification : Linear (C12-C14) alkyl alcohols, ethoxylated, propoxylated; Linear C12-14-alkyl alcohols, ethoxylated, propoxylated

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

Identified uses	
Base for detergent formulations. Detergent. Emulsifying agent. Industrial cleaners. Manufacture of soaps and detergents.	
Uses advised against	Reason
Not determined.	-

#### 1.3 Details of the supplier of the safety data sheet

PCC Exol SA, Sienkiewicza 4, 56-120 Brzeg Dolny, Poland  
Phone: +48 71 794 2127

e-mail address of person responsible for this SDS : kch@pcc.eu

#### 1.4 Emergency telephone number

##### National advisory body/Poison Center

Telephone number : Not available.

##### Supplier

Telephone number : Telephone: +48 71 794 2555, +48 71 794 2441 (available 24h/day) or +48 71 794 2690 (fax) or the closest local Fire Brigade

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product definition : Polymer

#### **Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Skin Irrit. 2, H315

Eye Irrit. 2, H319

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.

#### **Precautionary statements**

Prevention : P280 - Wear protective gloves:Wear eye or face protection:  
P264 - Wash hands thoroughly after handling.

Response : 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.  
P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container to hazardous or special waste collection point.

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

### 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII :

PBT	P	B	T	vPvB	vP	vB
No.	No.	No.	No.	No.	No.	No.

Other hazards which do not result in classification : The product does not contain components included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, and identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration  $\geq 0.1\%$  (w/w).

## SECTION 3: Composition/information on ingredients

### 3.1 Substances : Mono-constituent substance

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Alcohols, C12-14, ethoxylated, propoxylated	REACH #: Polymer CAS: 68439-51-0	>99.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 <b>See Section 16 for the full text of the H statements declared above.</b>	-	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

#### Type

[1] Constituent

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Put on appropriate personal protective equipment (see Section 8).

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

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

### SECTION 5: Firefighting measures

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#### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Use alcohol-resistant foam to extinguish.
- Unsuitable extinguishing media** : Never direct a water jet into the container in order to prevent any splashing of the product, which could cause the fire to spread.

#### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide (CO)  
metal oxide/oxides

#### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### SECTION 6: Accidental release measures

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#### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### 6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Do not absorb in sawdust or other combustible material.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## **SECTION 7: Handling and storage**

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The information in this section contains generic advice and guidance.

### **7.1 Precautions for safe handling**

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store between the following temperatures: 10 to 40°C (50 to 104°F). Store in accordance with local regulations. Shelf life: 24 months from the date of manufacture. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.  
For a period of two weeks the product may be stored at temperature 75 °C

### **7.3 Specific end use(s)**

- Recommendations** : No additional information.
- Industrial sector specific solutions** : No additional remark.

## **SECTION 8: Exposure controls/personal protection**

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The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### **8.1 Control parameters**

#### **Occupational exposure limits**

No exposure limit value known.

- Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

No DNELs/DMELs available.

#### **PNECs**

No PNECs available.

### **8.2 Exposure controls**

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### **Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical product, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.

### **Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. In case of a long-term direct exposure, nitrile rubber/ nitrile latex > 0.4 mm thick, of minimum time of penetration 480 min should be used. In case of a short-term direct exposure gloves nitrile/ nitrile rubber > 0.2 mm thick, of minimum time of penetration 30 min should be used.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: chemical-resistant protective suit

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Suitable protective footwear.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapor filter (Type A) full-face mask

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## **SECTION 9: Physical and chemical properties**

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The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### **9.1 Information on basic physical and chemical properties**

#### **Appearance**

**Physical state** : Liquid. [Clear to slightly hazy liquid.]

**Color** : Colorless to light yellow.

**Odor** : Characteristic. [Slight]

**Melting point/freezing point** : -9°C approx.

**Initial boiling point and boiling range** : Lack of data.

**Flammability** : Lack of data.

**Lower and upper explosion limit** : Lack of data.

**Flash point** : Open cup: 200°C (392°F) approx.

**Auto-ignition temperature** : Lack of data.

**Decomposition temperature** : Lack of data.  
**pH** : 5 to 7 [Conc. (% w/w): 1%]  
**Viscosity** : Dynamic: 60 mPa·s [25°C]  
**Solubility(ies)** :

Media	Result
cold water	Soluble
hot water	Easily soluble
methanol	Easily soluble
acetone	Easily soluble

**Solubility in water** : Lack of data.

**Partition coefficient: n-octanol/ water** : Lack of data.

**Vapor pressure** : Lack of data.

**Evaporation rate** : Lack of data.

**Relative density** : Lack of data.

**Density** : 0,97 g/cm<sup>3</sup> [25°C (77°F)]

**Vapor density** : Lack of data.

**Explosive properties** : Lack of data.

**Oxidizing properties** : No results available.

**Particle characteristics**

**Median particle size** : Not applicable.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** : Reactive with oxidizing agents

**10.2 Chemical stability** : Shelf life: 24 months from the date of manufacture.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : No specific data.

**10.5 Incompatible materials** : oxidizing agents

**10.6 Hazardous decomposition products** : Carbon dioxide. Carbon monoxide.

**SECTION 11: Toxicological information**

Source toxicological data have not been identified for the product. The information given herein has been developed based on data and ecotoxicology of components and similar substances.

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Alcohols, C12-14, ethoxylated, propoxylated	LD50 Oral	Mammal - species unspecified	>2000 mg/kg	-

**Conclusion/Summary** : No known significant effects or critical hazards. Toxicity data: CLP

**Acute toxicity estimates**

N/A

**Irritation/Corrosion****Conclusion/Summary**

**Skin** : Irritating to skin. Toxicity data: similar substance  
**Eyes** : Irritating to eyes. Toxicity data: similar substance  
**Respiratory** : No known significant effects or critical hazards.

**Sensitization****Conclusion/Summary**

**Skin** : No known significant effects or critical hazards.  
**Respiratory** : No known significant effects or critical hazards.

**Mutagenicity**

**Conclusion/Summary** : No known significant effects or critical hazards.

**Carcinogenicity**

**Conclusion/Summary** : No known significant effects or critical hazards.

**Reproductive toxicity**

**Conclusion/Summary** : No known significant effects or critical hazards.

**Teratogenicity**

**Conclusion/Summary** : No known significant effects or critical hazards.

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
No known significant effects or critical hazards.			

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
No known significant effects or critical hazards.			

**Aspiration hazard**

Product/ingredient name	Result
No known significant effects or critical hazards.	

**Information on the likely routes of exposure** : Routes of entry anticipated: Dermal.Eyes.  
 Routes of entry not anticipated: Oral, Inhalation.

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes skin irritation.  
**Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
**Ingestion** : No specific data.



## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : No specific data.

**Potential delayed effects** : No specific data.

### Long term exposure

**Potential immediate effects** : No specific data.

**Potential delayed effects** : No specific data.

### Potential chronic health effects

No known significant effects or critical hazards.

**Conclusion/Summary** : No known significant effects or critical hazards.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

The product does not contain components included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, and identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration  $\geq 0.1\%$  (w/w).

### 11.2.2 Other information

No additional information.

## **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Alcohols, C12-14, ethoxylated, propoxylated	Acute LC50 1 to 10 mg/l	Fish	96 hours
	Chronic EC50 >100 mg/l	Aquatic plants	21 days
	Chronic EC50 >100 mg/l	Daphnia	21 days
	Chronic EC50 >100 mg/l	Fish	21 days

**Conclusion/Summary** : No known significant effects or critical hazards.  
Ecotoxicity data : Literature

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Alcohols, C12-14, ethoxylated, propoxylated	OECD 301F	69,5 % - 28 days	-	-

**Conclusion/Summary** : This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Alcohols, C12-14, ethoxylated propoxylated	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Alcohols, C12-14, ethoxylated propoxylated	-	<500	low

#### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Lack of data.

**Mobility** : Water-soluble liquid

#### 12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Alcohols, C12-14, ethoxylated propoxylated	No	No.	No.	No	No.	No.	No.

#### 12.6 Endocrine disrupting properties

The product does not contain components included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, and identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration  $\geq 0.1\%$  (w/w).

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

**Hazardous waste** : Yes.

#### European waste catalogue (EWC)

Waste code	Waste designation
16 03 05*	organic wastes containing hazardous substances

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Barrel	15 01 10* packaging containing residues of or contaminated by hazardous substances
Container	15 01 10* packaging containing residues of or contaminated by hazardous substances
Tank	15 01 10* packaging containing residues of or contaminated by hazardous substances

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No	No.	No.

**ADN** : Not applicable.

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not regulated.

## SECTION 15: Regulatory information

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorization**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Other EU regulations**

DIRECTIVE 2008/68/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 September 2008 on the inland transport of dangerous goods (ADR, ADN, RID)

IATA /International Air Transport Association/ Dangerous Goods Regulations (ICAO/IATA DGR)

International Maritime Dangerous Goods Code (IMDG CODE)

REGULATION (EC) No 1223/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2009 on cosmetic products

REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents

**Ozone depleting substances (1005/2009/EU)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants (2019/1021/UE)**

Not listed.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**National regulations**

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**15.2 Chemical Safety Assessment** : Not applicable.

**SECTION 16: Other information**

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**Changes to the Safety Data Sheet** : SECTION 1: Identification of the substance/mixture and of the company/undertaking  
SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 11: Toxicological information  
SECTION 12: Ecological information  
SECTION 14: Transport information  
SECTION 15: Regulatory information  
SECTION 16: Other information

**Abbreviations and acronyms** : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
AOX = Adsorbable Organically Bound Halogens  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
CAS = Chemical Abstracts Service  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
CMR = Carcinogen, Mutagen or Reproductive toxicant  
CSA = Chemical Safety Assessment  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EC number = EINECS or ELINCS number  
EC50 = Half maximal effective concentration  
ES = Exposure Scenario  
EUH statement = CLP-specific Hazard statement  
EWC = European Waste Catalogue  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
H statement = CLP/GHS Hazard statement  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IC50 = Half maximal inhibitory concentration  
IMDG = International Maritime Dangerous Goods  
LC50 = Median lethal concentration  
LD50 = Median lethal dose  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration

R phrase = DSD/DPD Risk phrase  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]  
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
 RRN = REACH Registration Number  
 STOT = Specific Target Organ Toxicity  
 SVHC = Substances of Very High Concern  
 UN = United Nations  
 VOC = Volatile Organic Compound  
 vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Justification
Skin Irrit. 2, H315 Eye Irrit. 2, H319	Expert judgment Expert judgment

**Full text of abbreviated H statements**

H315	Causes skin irritation.
H319	Causes serious eye irritation.

**Full text of classifications [CLP]**

Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2

**Training advice** : Ensure operatives are trained to minimise exposures.

**Notice to reader**

The information contained herein is accurate to the latest knowledge and describes the product from the point of view of health and environmental protection as well as safe handling. The information presented in this SDS refers to the technical product only and will not apply to any processed product. Final determination of the suitability of any materials for the chosen application(s) is the sole responsibility of the user"