

# RaLex Washing up liquid

## Safety Data Sheet

Issue date: January 15, 2015; Version: 1; Page 12 of 12

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

#### 1.1. Product identifiers in accordance with Article 18, paragraph 3, point a) of Regulation (EC) No 1272/2008

Trade name: „RaLex Washing up liquid”

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

Recommended use: Product dissolves dirt and grease quickly leaving dishes clean and shiny with long lasting fragrance.

Use not recommended: Such uses are not identified.

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

Made in EU by "Prestige 2007" Ltd.; 48 Ivan Vazov Str, Plovdiv, Bulgaria

Phone: +442088270814

URL website: www.prestige2007.com

#### 1.4. Phone number in urgent cases in the country in which the product is marketed

Emergency phone: 0844 892 0111

Hours of operation: 24hrs

Name of poison centre: National Poisons Information Service (Cardiff)

Address: University Hospital Landough, Pentel Road, Penarth, UK

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

2.1.1. Classification of the mixture which arises from the application of the classification rules in Regulation (EC) No 1272/2008 (Regulation CLP)

2.1.1.1. „RaLex Washing up liquid” according to the definitions in Article 2 point 8 of Regulation (EC) No 1272/2008 is defined as **a mixture**.

2.1.1.2. Assessment of the information for the hazards of the mixture in accordance with Article 9, paragraph 1; 4 and 5 and Article 12 of Regulation (EC) No 1272/2008. Assessing the conformity of the properties of the mixture with the criteria for classification for each hazard class or differentiation in parts 2-5 of Annex I of the CLP Regulation:

- a) Physical hazards, Annex I, Part 2: Mixture does not meet the criteria for classification in the relevant classes physical hazards (See Section 7 and Section 9);
- b) Health hazards, Annex I, Part 3: Mixture does not meet the criteria for classification in the relevant classes of hazards relating to health (See Section 11);
- c) Environmental hazards, Annex I, Part 4: Mixture does not meet the criteria for classification in relevant hazards classes referring to the environment (See Section 12).

2.1.2. Classification of the preparation "RaLex Washing up liquid" in the danger categories listed in Article 2 of Directive 1999/45/EC (Directive DPD) according to the degree and specific nature of the risks involved.

2.1.2.1. Definition of the product in accordance with Article 2 paragraph 1, point b):

Based on its composition, the product is defined as **a preparation**.

2.1.2.2. Assessment of the risks that are determined by properties of the preparation in accordance with procedures described in paragraphs 5, 6 and 7 of Directive DPD:

The preparation does not meet the criteria for classification in categories of danger defined by Directive DPD.

## 2.2. Label elements

2.2.1. Label elements according to Regulation (EC) № 1272/2008 corresponding to the classification.

- |   |  |
|---|--|
| a) Hazard pictograms in under Article 19:     | Hazard pictogram shall not apply;  |
| b) Signal word in accordance with Article 20: | Signal word shall not apply;   |
| c) Hazard statements under Article 21:        | Not required to identify hazard statements;  |
| d) Precautionary statements under Article 22  |  |
| - General recommendations:                    | P102 Keep out of reach of children.  |
| - In response:                                | P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.<br>Remove contact lenses, if present and easy to do. Continue rinsing.<br>P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |

2.2.2. Labeling requirements of the detergent<sup>1</sup> „RaLex Washing up liquid“ under Regulation (EC) № 907/2006

2.2.2.1. Contains

- |              |  |
|--------------|--|
| Surfactants: | Anionic surfactants 5% or more but less than 15%;<br>Amphoteric surfactants less than 5%;<br>Nonionic surfactant less than 5%; |
| Perfume:     | Not required to be indicated aromatic <sup>2</sup> substances  |

2.2.2.2. Address of the website where was published

product composition: [www.prestige2007.com](http://www.prestige2007.com)

## 2.3 Other hazards

Assessing the conformity of the properties of the mixture

(substances - ingredients) with the criteria for PBT or

vPvB according to Regulation (EU) № 253/2011: See Section 12, point 5.

## SECTION 3: Composition / information on ingredients

### 3.1. Ingredients that determine the classification of the mixture „RaLex Washing up liquid“

3.1.1. Substances / mixtures that present a hazard to health

or the environment within the meaning of Regulation (EC)

№ 1272/2008, attendees in an individual concentration

equal to or higher than

- |   |                      |
|---|----------------------|
| a) the generic concentration limits which are referred in<br>Parts 3-5 of Annex I of the CLP Regulation : | See Table 1, page 3; |
| b) specific concentration limits specified in Part 3 of<br>Annex VI to the CLP Regulation:                | See the footnote 3;  |

3.1.2. Substances which have regulated limit values of

exposure at workplace: See section 8.1;

3.1.3. Substances that are persistent, bioaccumulative and

toxic: Such substances are not contained, see section 12.5.

<sup>1</sup> Mixture "RaLex Washing up liquid", which has a cleaning function and falls within the scope of Regulation (EC) 648/2004. Additional requirements for the labeling of detergents marketed for the mass consumer are introduced in Article 11 and Annex VII of Regulation (EC) 648/2004, which is replaced by Annex II of Regulation (EC) 907/2006.

<sup>2</sup> 1) The detergent "RaLex Washing up liquid" does not contain aromatic substances that can cause allergy with concentration higher than 0,01%, over which, according to Regulation (EC) 648/2004 these flavoring substances should be indicated on the label on the packaging of detergents placed on sale to the general public.

2) Aromatic substances in the mixture, which contained the list of substances Annex III to Regulation (EC) № 1223/2009 of 30 November 2009 on cosmetic products have maximum individual concentrations not exceeding the specified limits relating to products which are washed away.

Table 1

Chemical name IUPAC name INCI name	CAS N° EC N° RRN	Limits of C <sub>w/w</sub>	Classification of substances under the CLP Regulation
1.1) Sodium C10-C16 alkyl ethoxy sulphate or 1.2) Sodium Lauryl Ether Sulfate (SLES) 2) Sodium 2-(2-dodecyloxyethoxy)ethyl sulphate 3) SODIUM LAURETH SULFATE	68585-34-2 500-223-8 01-2119488639-16-XXXX	1,0% - 5,0%	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412
Cocoamide DEA Amides, coco, N,N-bis(hydroxyethyl) COCAMIDE DEA	68603-42-9 271-657-0 01-2119490100-53-XXXX	1,0% - 5,0%	Skin Irrit. 2; H315 Eye Dam. 1; H318
Cocamidopropyl betaine (CAPB) [[3-(Dodecanoylamino)propyl](dimethyl)ammonio]acetate COCAMIDOPROPYL BETAINE	61789-40-0 263-058-8 01-2119488533-30-XXXX	1,0% - 5,0%	Eye Dam. 1; H318 Aquatic Acute 1;H400
Linear Alkyl Benzene Sulphonic Acid (LABSA) Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs (HLAS) DODECYLBENZENE SULFONIC ACID	85536-14-7 - 01-211490234-40-XXXX	0,5% - 1,0%	Skin korr.1B; H314 Acute Tox.4; H302
Product neutralization of HLAS Linear Alkylbenzene Sulphonate (LAS) Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts (NaLAS) SODIUM C10-13 ALKYL BENZENESULFONATE	68411-30-3 270-115-0 01-2119489428-22-XXXX	0,5% - 1,0%	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Damage 1; H318
Sodium hydroxide <sup>3</sup> Sodium hydroxide SODIUM HYDROXIDE	1310-73-2 215-185-5 01-2119457892-27-XXXX	0,5% - 1,0%	Skin Irrit. 2; H315 Eye Irrit. 2; H319

Note: Meaning of the codes of Hazard statements is explained in Section 16

#### SECTION 4: First aid measures

Instructions for first aid at exposure to the mixture, the identified symptoms and effects, and the need for medical care, including their urgency – see table 2

Table 2

Routes of exposure	Description of first aid measures	Most important symptoms and effects, both acute and delayed	Indication of any immediate medical attention and special treatment needed
<b>Skin contact</b>	Wash with water.	Effect of irritation is possible in case of injury to the skin.	With prolonged skin irritation seek medical advice.
<b>Eye contact</b>	Wash eyes with running water. Eyelids should be opened.	Eye irritation, which is removed immediately after washing.	With prolonged eye irritation seek medical advice.
<b>Ingestion</b>	Do not induce vomiting.	Can cause flatulence and gas release.	When prolonged discomfort, seek medical advice. Inform your doctor about the website, on which the information on the composition of the detergent can be found.
<b>Inhalation</b>	No need for first aid.	No effects and symptoms.	Medical assistance is not needed.

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

- 5.1.1. Suitable extinguishing media: All available extinguishing media. Choosing the appropriate extinguishing media depends on the materials that burn around.
- 5.1.2. Unsuitable extinguishing media: Unsuitable extinguishing media are not defined.

<sup>3</sup> Specific concentration limits Sodium hydroxide under with Index N° 011-002-00-6 in Part 3 of Annex VI to the CLP Regulation: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % Eye Irrit. 2; H319: 0,5 % ≤ C < 2 %

## 5.2. Special hazards arising from the mixture

It is possible gases carbon monoxide and carbon dioxide to be released.

## 5.3. Advice for firefighters

Wear full a set of individual protection means of the body and a self-contained breathing apparatus that meets the requirements of EN 137: 2006.

## SECTION 6: Accidental release measures

Appropriate countermeasures in cases of spills, leaks or releases of the mixture in order to prevent or minimize the adverse effects on persons, property and the environment.

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

#### 6.1.1. For non-emergency personnel

- In a small spill:

*Personal precautions:* Protect your eyes from contact with the mixture.

*Personal protective equipment:* It is not necessary to use such.

*Emergency procedures:* Eliminate the cause of the emergency release.

- In large spill:

*Personal precautions:* Do not take risky actions.

*PPE:* Use personal protective equipment that are defined for emergencies, see section 8.2.

*Emergency procedures:* Cover the openings of drains. Limit the spread of the spill,

see section 6.3. Inform persons who are responsible for emergencies.

#### 6.1.2. For persons responsible for the emergencies:

- In a small spill:

*Precautions:* Organise procedures for the safe containment and cleaning up of the spill.

*PPE:* Inspect the compatibility and the functionality of personal protective equipment.

*Emergency procedures:* Take necessary action to prevent emergency situations.

- In large spill:

*Precautions:* Undertake action to the evacuation of personnel from the workplace if necessary.

*PPE:* Check the status of PPE.

*Emergency procedures:* Restrict access to sewerage openings. Cover with appropriate materials openings of sanitation. For dispatching an expiration of significant amount of the mixture into the sewage system inform respective treatment plant. In case of environmental contamination inform the institution responsible for environmental protection.

### 6.2. Environmental precautions:

Properly storage of the mixture, *see Section 7*. Observe requirements on a good manufacturing practice.

### 6.3. Methods and material for containment and cleaning up spill of the mixture

#### 6.3.1. Recommendations on ways to limit the spill:

Constructing separating embankments of earth, sand and other inert materials.

#### 6.3.2. Methods and techniques for cleaning the spill

##### 6.3.2.1. Neutralization techniques:

Waste mixture is not required to be neutralized in advance, *see Section 9*.

##### 6.3.2.2. Cleaning techniques:

Collect the main amount of the mixture with appropriate absorbent or by pump

##### 6.3.2.3. Absorbent materials:

a) Natural absorbents - vermiculite, diatomite, clay or clay silicates, silica gel or other absorbent;

b) Synthetic absorbent polymers – SAP (crosslinked polymer of sodium acrylate)

##### 6.3.2.4. Specific equipment:

Special equipment is not necessary.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

7.1.1. Handling of incompatible substances, mixtures or materials:

Unsuitable substances, mixtures and materials have not been identified.

7.1.2. Limiting the spread of the detergent in spillage:

Keep the mixture in closed original packings.

## 7.2. Conditions for safe storage, including incompatibilities

### 7.2.1. Conditions for safe storage

#### 7.2.1.1. Warehousing<sup>4</sup>

Mixture "RaLex Washing up liquid" is suitable for storage jointly with all substances and mixtures for which explicitly it is not required to be stored separately.

#### 7.2.1.2. Suitable weather conditions of storage:

Temperature higher than 1°C and less than 50°C away from direct sunlight.

### 7.2.2. Incompatibilities:

Incompatibilities not been identified.

### 7.3. Specific end use(s)

Detailed and operational recommendations related to the identified use are not necessary.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Limits of occupational exposure to substances under Directive 98/24/EC

Workplace exposure limits (WELs), UK under EH40/2005,

Second edition, published 2011:

substance **Sodium hydroxid**, CAS N<sup>o</sup> 1310-73-2

Occupational exposure limit value Short-term (time usually 15 min) = 2 mg/m<sup>3</sup>

### 8.2. Exposure control

#### 8.2.1. Appropriate engineering controls

Engineering control measures are not necessary.

#### 8.2.2. Individual protection measures, such as personal

protective equipment (PPE)

table 3

Table 3

Exposure routes	Identified use	Manufacture, PPE Category I, according to Directive 89/686/EEC	Accident, PPE Category II, according to Directive 89/686/EEC
Eye / Face	<b>Safety glasses complying with EN 166-2001</b>		
	Not required.	Not required.	Safety glasses - material: glass or polymeric materials
Hands	<b>Protective gloves complying with EN 374-2004</b>		
	Not required.	Material: Natural latex; Protective index: Class 4, Break through time > 120 min.	Material: Natural rubber (NR); Protective index: Class 5, Break through time > 240 min.
Body	Not required.	Not required.	Boots in accordance with DIN-EN 346; Material: Rubber.
Respiratory tract	Not required.	Not required.	Not required.

#### 8.2.3. Control of environmental exposure

Observe directions for use and storage. Do not allow waste disposal of the mixture and packaging waste in the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties of the mixture – table 4

Table 4

Physical and chemical properties	Information	Physical and chemical properties	Information
1.) Odour	Liquid	11.) Evaporation rate	No information available.
2.) Smell	Determined by perfume	12.) Vapor pressure	No information available.
3.) Color	Determined by colorant	13.) Vapor density	No information available.
4.) pH (1g/l at 20°C)	7,0 – 8,0	14.) Relative density	No information available.
5.) Melting point/freezing point	No information available.	15.) Density (g/cm <sup>3</sup> at 20°C)	No information available.
6.) Initial boiling point and boiling range	No information available.	16.) Solubility in water (g/100g at 20°C)	Completely soluble
7.) Flash point	Not applicable.	17.) Coefficient: n-octanol / water	No information available.
8.) Flammability (solid, gas)	Not applicable.	18.) Viscosity	No information available.
9.) Ignition temperature	Not applicable	19.) Explosive properties	Not applicable.
10.) Decomposition temperature	No information available.	20.) Oxidising properties	Not applicable.

<sup>4</sup> Warehousing is storage over a later use and forwarding activities of another user. Storage of products includes temporary storage for a period not longer than 24h.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Changes in the condition of the mixture, leading to hazardous side effects as a result of the impact of

- a) physical factors: not observed;  
 b) chemical interactions: not observed.

**10.2. Chemical stability:**

Thermodynamically stable system under the conditions of use and storage.  
 The mixture does not contain stabilizers to preserve the chemical sustainability.

**10.3. Possibility of hazardous reactions:**

Excluded under specified conditions of use and storage.

**10.4. Conditions to be avoided:**

Temperature below than 1°C and higher than 50°C.

**10.5. Incompatible materials:**

Such are not identified.

**10.6. Hazardous decomposition products**

Decomposition products with hazardous properties have not been identified.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Mixture "RaLex Washing up liquid " has not been tested in order to establish and prove the specific health effects. Information is provided to the ingredients - substances listed in table 1, section 3, which is relevant to the classification of the mixture. Known chemical interactions of substances in the mixture. Benzenesulfonic acid, 4-C10-13-sec-alkyl derivatives (HLAS) is neutralized<sup>5</sup> by reaction with Sodium hydroxide (NaOH) to the formation of Benzenesulfonic acid, C10-13-alkyl derivatives, sodium salts (NaLAS, c CAS N<sup>o</sup> 68411-30-3). As a result of the neutralization reaction of the acid and the base:

- pH of the mixture is adjusted in the range 7-8;
- The possible individual potential effects of the substances are modified as a result of their neutralization in mixture.

**11.1.1. Acute toxicity**

The hazard class - Acute toxicity according to routes of exposure of the substance/mixture is separated into acute oral, acute dermal and acute inhalation toxicity. Criteria for the classification of the mixture "RaLex Washing up liquid" in the hazard class Acute toxicity are the values for acute toxicity estimates (ATE), calculated on the basis of LD<sub>50</sub> or LC<sub>50</sub> of substances, see table 5.

According to the calculated assessment of acute toxicity, specific exposure - ingestion, the mixture does not meet the criteria<sup>6</sup> for classification in subsection acute oral toxicity.

Table 5

CAS N <sup>o</sup>	Oral	Test method	Dermal	Test method	Reference
68585-34-2	LD <sub>50</sub> (rat) = 7400 mg/kg bw	OECD 401	LD <sub>50</sub> (rat) > 2000 mg/kg bw	OECD 402	A
68603-42-9	LD <sub>50</sub> (rat) = 1500 mg/kg bw (B)	-	LD <sub>50</sub> (rabbit) > 2000 mg/kg bw (C)	-	-
61789-40-0	LD <sub>50</sub> (rat) > 2000 mg/kg bw	OECD 401	LD <sub>50</sub> (rat) > 2000 mg/kg bw	OECD 402	D
68411-30-3	LD <sub>50</sub> (rat) = 1080 mg/kg bw	OECD 401	LD <sub>50</sub> (rat) > 2000 mg/kg bw	OECD 402	E
ATE	<b>8333 mg/kg bw</b>	-	does not require the calculation	-	-

**11.1.2. Corrosion/irritation of the skin**

There are no present substances in the mixture with potential for corrosive effect on the skin. It is experimentally demonstrated that the substance Cocoamide DEA having a concentration of 10% causes no irritant effect on the skin (see table 6 page 7). Substance Linear Alkylbenzene Sulphonate, which is formed as a result of the neutralization reaction at maximum concentration in the mixture, does not have potential for skin irritation (see table 6). The total concentration of substances with potential skin irritation is not enough according to the criteria of Regulation CLP to justify the classification of the mixture as category 2 skin irritation.

**11.1.3. Serious eye damage/eye irritation**

Substances present in the mixture at their maximum concentrations do not have the potential for corrosive effects on eye exposure. See the test results in table 6 page 7. The results of the testing of Linear Alkylbenzene Sulphonate have been shown to at 1% the substance has not potential for eye irritation. Mixture does not meet the criteria<sup>7</sup> of Regulation CLP for classification in category 2, eye irritation.

<sup>5</sup> C<sub>18</sub>H<sub>30</sub>O<sub>3</sub>S (HLAS) + NaOH → C<sub>18</sub>H<sub>29</sub>NaO<sub>3</sub>S (NaLAS) + H<sub>2</sub>O

<sup>6</sup> Acute oral toxicity: ATE ≤ 2000 mg/kg bw

Table 6

<b>Substance CAS N°</b>	<b>Test Method</b>	<b>Results</b>	<b>Reference</b>
68603-42-9 (10%)	Species: human, contact time 2h	Potential: not skin irritating. The result has been confirmed by independent tests of two separate research groups.	F
68411-30-3 (at 1% and 2.5%)	OECD Guidelines, species: rabbit	Potential: not skin irritating	J
68585-34-2 (40% - 70%)	Draize Test, guinea pig	Potential: reversible severe eye irritation	G
68603-42-9	Draize Test, rabbit 100 uL/24h	Potential: reversible moderate eye irritation	H
61789-40-0 (2%)	Not rinsed Reversibility assessed (22 days)	Potential: moderately eye irritating	I
68411-30-3 (1%)	OECD Guidelines, species: rabbit	Potential: not eye irritating	J

#### 11.1.4. Respiratory sensitization or skin sensitisation

The mixture does not contain substances classified as skin sensitizers. Concerning the substance Cocamide DEA and the substance Cocamidopropyl betaine there are some tests under which skin sensitization is established. Test results for skin sensitization are given in table 7. Occasional cases of established contact dermatitis caused by the substance Cocamide DEA and some positive reactions to skin sensitization to the substance Cocamidopropyl betaine are not enough grounds for classification of the mixture as a skin sensitizer. For the purposes of classification it is necessary the positive results in people to be confirmed by positive results in tests on animals. Conditions of the tests in animals have to be consistent with the guidelines of OECD.

Table 7

<b>Substance CAS N°</b>	<b>Test Method</b>	<b>Results</b>	<b>Reference</b>
68603-42-9	Guinea pig maximization test (GPMT)	Result: not skin sensitizing	F
68603-42-9 (0.1 - 10%)	People who have been exposed to products for hand washing that had been used regularly at work.	Result: Cocamide DEA induced occupational allergic contact dermatitis in all patients.	K
61789-40-0	GPMT guinea pig at least 10, Induction: 0.5 % injection, 10 % patch	Result: not skin sensitizing (0 % positive reactions)	I
	Draize test, guinea pig	Result: no proven chemical sensitizing potential	L
	Modified Draize test	Result: no proven chemical sensitizing potential	
61789-40-0 1.5 or 3.0%	A local lymph node assay (LLNA) with CABP	Result: was positive for sensitization	I
	Patch tests, 141 volunteers	Result: negative	
	Induction: Application time: 24 h, 3 times/week, 3 weeks Challenge: after 10 - 15 days, Application time: 24 h Scoring after Induction and Challenge (24, 72 h)		

#### 11.1.5. Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity

Mixture "RaLex Washing up liquid" do not contain substances classified in the hazard classes: germ cell mutagenicity, carcinogenicity and reproductive toxicity.

#### 11.1.6. Specific target organ toxicity - single exposure (STOT)

Health effects in a single exposure to the mixture (ingredients) that may disturb function, both reversible and irreversible, immediate or subsequently functions of the organism are discussed in the foregoing points.

#### 11.1.7. STOT - repeated exposure

Properties of substances at the concentrations in the mixture eliminates potential for consistent and identifiable toxic effects, significant toxicological changes that affect the function or morphology of a tissue / organ, or is causing dramatic changes to the biochemistry or hematology body.

#### 11.1.8. Aspiration hazard.

Formation of aerosols and gases is not observed in the identified use of the mixture.

## SECTION 12: Ecological information

### 12.1. Toxicity

Mixture "RaLex Washing up liquid" has not been tested to establish the potential for acute or long-term hazard to the aquatic environment. Test data about potential for acute and chronic toxicity of substances in Table 1 for the three trophic levels of aquatic organisms are summarized in

<sup>7</sup> The total concentration of substances with potential for eye irritation, triggering classification of a mixture as causing reversible eye effects must be equal to or higher than 10%.

table 8, page 8. The multiplication factor (M - factor) for the substances, which corresponds to the lowest value for the experimentally determined lethal dose / lethal concentration of substances is 1. The mixture does not meet the criteria<sup>8</sup> under Regulation CLP for classification in Category 1 Acute aquatic toxicity. The criteria for the classification of the mixture in the categories chronic aquatic toxicity include two types of information - data about acute aquatic toxicity and data about the harmful effects on the environment (information on degradability - point 12.2 and information on bioaccumulation - point 12.3).

Table 8

Substance CAS №	Data for acute aquatic toxicity: LC50 and EC50 [mg/l]			Reference
	Fish	Crustaceans	Algae	
68585-34-2	Fish, 96h LC50 = 7,1 mg/l	<i>Daphnia magna</i> , 48h EC50 = 7,4 mg/l	Algae, 48h EC50 = 27,7 mg/l	M
68603-42-9	<i>Brachydanio rerio</i> , 96h LC50 = 5,4 mg/l (ISO 7346/1-3)	<i>Daphnia pulex</i> , 48h EC50 = 2,4 mg/l (Static test)	<i>Scenedesmus acutus</i> , 96h EC50 = 2,3 mg/l (DIN 38412)	F
61789-40-0	<i>Brachydanio rerio</i> , 96h LC50 = 2,0 mg/l (Semi static test)	<i>Daphnia magna</i> , 48h EC50 = 6,5 mg/l	<i>Scenedesmus subspicatus</i> , 96h EC50 = 0,6 mg/l	N
	-	-	Algae, 72h IC50 = 1,6 mg/l	P
68411-30-3	<i>Lepomis macrochirus</i> , 96h LC50 = 1,67 mg/l	<i>Daphnia magna</i> , 48h EC50 = 1,62 mg/l	<i>Scenedesmus capricornutum</i> , 96h IC50 = 29,0 mg/l	J
Substance CAS №	Data for chronic (long term) aquatic toxicity: NOEC [mg/l], Exposure time [days or hours]			Reference
	Fish	Crustaceans	Algae	
68585-34-2	Fish, 45d NOEC = 1,0 mg/l (OECD 203)	-	Algae, 72h NOEC = 0,95 mg/l (OECD 201)	M
68603-42-9	-	<i>Daphnia magna</i> , 21d NOEC = 1,0 mg/l	-	F
61789-40-0	<i>Brachydanio rerio</i> , 96h NOEC = 1,7 mg/l (Semi static test)	<i>Daphnia magna</i> , 21d NOEC = 0,9 mg/l	<i>Scenedesmus subspicatus</i> , 96h NOEC = 0,09 mg/l	N
	<i>Oncorhynchus mykiss</i> , 28d NOEC = 0,16 mg/l (OECD 204)	-	-	O

Mixture does not meet the criteria<sup>9</sup> for classification in a category 4 chronic aquatic toxicity.

### 12.2. Persistence and degradability

12.2.1. Biodegradation of organic substances which are present in the mixture.:

Table 9

Table 9

Substance CAS №	Test Method	Level of biodegradation	Reference
68585-34-2	OECD 301 B (Modified Sturm Test, Respirometry: measure the increase of carbon dioxide.)	80% (28 d)	S
68603-42-9	OECD 301 B (Modified Sturm Test, Respirometry: measure the increase of carbon dioxide.)	92% (28 d)	Q
61789-40-0	OECD 301 B (Modified Sturm Test, Respirometry: measure the increase of carbon dioxide.)	100% (20 d)	N
68411-30-3	OECD 301 B (Modified Sturm Test, Respirometry: measure the increase of carbon dioxide.)	85% (28 d)	R

12.2.2 Evaluation of the biodegradability of organic substances in the mixture, respectively, with the requirements for biodegradability under Regulation (EC) № 1272/2008 and Regulation (EC) № 648/2004:

- Organic substances in the mixture meet the criteria for ready biodegradability according to Regulation CLP;
- Surfactants in the detergent comply with the conditions for biodegradability (mineralization) under aerobic conditions in accordance with Regulation (EC) 648/2004.

### 12.3. Bioaccumulative<sup>10</sup>

The potential for bioaccumulation of organic substances is determined by the partition coefficient between octanol and water, which is generally described as "Log Kow". Substances for which there is "Log Kow ≥ 4" have a real potential to bioconcentrate. For the purpose of classification it is

<sup>8</sup> Method on summation: Sum of components with potential for acute aquatic toxicity multiplied by the multiplication factor should be equal to or higher than 25%

<sup>9</sup> The mixture is classified in Category 4 Chronic toxicity if the sum of the percentages of components classified in categories 1, 2, 3 and 4 chronic toxicity was equal to or greater than 25%.

<sup>10</sup> Bioaccumulative potential is the potential of the substance or certain substances in a mixture to accumulate in biota and, eventually, to pass through the food chain.



taken into account the experimentally determined bioconcentration factor (BCF), which provides a better assessment. BCF  $\geq$  500 in connection with fish is an indicator of bioconcentration of substances - Table 10.

#### 12.4. Mobility in soil

Mobility in soil is the potential of the substance or the constituents of a mixture, if released into the environment, to move under natural forces to the groundwater or far from the site of release. Mobility in soil is described by Koc values that are useful in predicting the mobility of organic pollutants in the soil. Higher values correlate with less mobile organic compounds. Data concerning Koc values for substances (ingredients) is presented in Table 10.

Table 10

Substance, CAS №	BCF values	Log Kow	Koc	Reference
9004-82-4 (68585-34-2)	70,79 L/kg wet-wt (EPI QSAR programme)	-	-	T
68603-42-9	37,20 L/kg wet-wt (Regression-based method)	2,89	39,53 L/kg (MCI method)	U
61789-40-0	70,79 L/kg wet-wt (Regression-based method)	0,69	647,50 L/kg (MCI method)	V
68411-30-3	204,2 L/kg wet-wt (Arnot-Gobas method)	2,02	3728,00 L/kg (MCI method)	W

#### 12.5. Results of PBT and vPvB assessment

"RaLex Washing up liquid" does not contain substances that are identified as a PBT according to criteria of Regulation (EC) № 253/2011.

### SECTION 13: Disposal considerations

Recommendations for appropriate management of the waste of mixture "RaLex Washing up liquid" and the packaging waste to assist in the determination of safe and environmentally conformed options for waste management in accordance to Directive 2008/98/EC (EU Waste Framework Directive) of 19 November 2008.

#### 13.1. Methods of waste treatment

Appropriate methods of waste treatment of the mixture and packaging are determined by the physical/chemical properties of the waste, which determine the classification of waste.

##### 13.1.1. Classification of the waste from the mixture

- a) Conformity assessment of waste product with the conditions for defining waste as hazardous:

According to the Waste Framework Directive, Decision 2000/532/EC and Technical guidance WM2 - Interpretation of the definition and classification of hazardous waste after application of computational methods<sup>11</sup> for classifying determined that the waste detergent does not meet the criteria<sup>12</sup> for classification as hazardous waste;

- b) Identification of the waste detergent and packaging waste by setting six digit code on waste from List of Waste (LoW):

**20 01 30** waste code of "RaLex Washing up liquid";  
**15 01 02** waste code of consumer packages.

##### 13.1.2. Recommendations regarding methods for waste treatment<sup>13</sup>

- a) Utilization of waste:

For the possible utilization of packaging waste through recycling it is recommended packaging waste to be collected separately from the waste mixture and from the total waste stream;

- b) Waste disposal:

Dispose of waste in designated areas.

### SECTION 14: Transport information

Classification information for transporting / shipment of packaged "RaLex Washing up liquid" by road, rail, sea, inland waterway and air, see table 11, page 10.

<sup>11</sup> The composition of the mixture is known.

<sup>12</sup> The waste product has properties that are described under codes "H4", "H5" and "H8" in the Annex III of WFD, but do not have the characteristics which are required under Article 2 of Decision 2000/532/EC to determine the waste as hazardous. The mixture contains a substance with characteristics described below code H14 in Annex III of Directive 2008/98/EC, but the mixture is not classified as hazardous for the environment.

<sup>13</sup> Utilization on the one hand and the opposite term disposal (defined negatively as an activity that is not in use) together constitute waste treatment.

Table 11

Nº	Transport classification in accordance with the rules of the UN	ADR/RID	ADN/ADNR	IMDG	IATA
14.1	UN number	unregulated	unregulated	unregulated	unregulated
14.2	Shipping name	-	-	-	-
14.3	Classes Transport hazard	-	-	-	-
14.4	Packing group	-	-	-	-
14.5	Environmental Hazards	no	no	no	no
14.6	Special precautions for user	no	no	no	no
14.7	Transport in bulk	MARPOL 73/78, Annex II and the IBC Code			
		Not provided.			

## SECTION 15: Regulatory information

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

- Directive 96/82/EC

Substance components of the mixture are not regulated;

- Directive 2012/18/EU

Substance components of the mixture are not included in Annex I, Part 2.

### 15.2. Safety Assessment of the mixture

Manufacturer has not conducted chemical safety assessment (CSA) for the mixture because it is not required.

## SECTION 16: Other information

### 16.1. Requirements concerning the compilation of safety data sheet

This SDS is compiled in accordance with Regulation Nº 453/2010/EEC, amending Annex II to Regulation (EC) Nº 1907/2006.

There has been a self-classification of the mixture „RaLex Washing up liquid”, which includes identifying the nature and extent of the hazards of the mixture and evaluate compliance with the criteria for classification in accordance with Regulation (EC) 1272/2008.

### 16.2. Meaning of codes to Hazard statements of the hazard substances specified in Section 3

**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.

**H400** Very toxic to aquatic life.

**H412** Harmful to aquatic life with long lasting effects.

### 16.3. List of acronyms and abbreviations that are not explained in the text

C <sub>w/w</sub>	Concentration determined by weight / weight (dissolved substance [g] to 100 [g] solution);
RNN	REACH registration number;
REACH	Regulation (EC) No 1907/2006 Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency;
PBT or vPvB	Persistent bioaccumulative and toxic or (very) Persistent, (very) Bioaccumulative substances;
LD50	It is an abbreviation for “Lethal Dose 50%.” It is sometimes also referred to as the “Median Lethal Dose”;
EC50	Half maximal effective concentration (EC <sub>50</sub> ) refers to the concentration of a drug, antibody or toxicant which induces a response halfway between the baseline and maximum after some specified exposure time;
LC50	Lethal Concentration of a substance that is lethal to 50% of the organisms exposed to it in a toxicity test – is a useful tool because it can predict the effects of a potential toxin in aquaculture systems.

IC50	Measure of the effectiveness of a substance in inhibiting a specific biological or biochemical function.
NOEC	No Observed Effect Concentration;
OECD	Organisation for Economic Co-operation and Development;
EPI QSAR	Computer models giving quantitative relationship between structure and activity to predict toxic, biological and physicochemical properties;
MCI	Molecular Connectivity Index;
MARPOL73/78	Marpol 73/78 is the International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978;
IBC Code	BC Code provides an international standard for the safe carriage by sea of dangerous and noxious liquid chemicals in bulk;
ADR / RID	The European Agreement concerning the International Carriage of Dangerous Goods by Road was done at Geneva on 30 September 1957 under the auspices of the United Nations Economic Commission for Europe, and it entered into force on 29 January 1968. RID is the part of the Intergovernmental Convention for International Carriage by Rail Gefahrgut-Verordnung Straße u Eisenbahn;
IMDG	The International Maritime Dangerous Goods;
IATA	International Air Transport Association;
ADN/ADNR	European Agreement on the Carriage of Dangerous Goods by Inland Waterways - ADN. Verordnung über die Beförderung gefährlicher Güter auf dem Rhein (ADNR).

#### 16.4. References

- A:** Safety data sheet Version: 7, Printing date 16.05.2013, Product identifier: Trade name: HANDSTAND SHOWER SOAP, Article number: UK5-5201;
- B:** SDS, Printing date 09.04.2013, Version: 5; Product identifier: Trade name: Original Orange; Manufacturer/Supplier: ZEP UK; Forward Chemicals Limited;
- C:** SDS, Printing date 28.06.2011, Version: 7; Product identifier: Trade name: Hansamid CFAD; Manufacturer/Supplier: Hansa Group AG;
- D:** Safety Data Sheet Printing date 02.03.2012, Vers.no.: 5; Product trade name: Hansateric CAPB 35, Manufacturer/Supplier: Hansa Group AG;
- E:** MSDS Date completed: April 01, 2014; Product name: LEMON TREE; Prepared by: Technical Services Department, Ostrem Chemical Co. Ltd;
- F:** IUCLID Dataset substance ID: 8051-30-7, Creation date: 19-FEB-2000;
- G:** Safety Data Sheet Texapon® N 56, Revision date: 27.02.2013, Version: 1.2; BASF Canada Inc;
- H:** MSDS Name: Fisherbrand® Versa-Clean™, ACC# 45385;
- I:** HERA Human and Environmental Risk Assessment on ingredients of household cleaning products, Cocamidopropyl betaine (CAPB), Edition 1.0 June 2005;
- J:** SIDS INITIAL ASSESSMENT REPORT For 20th SIAM Paris, France, 19-21 April, 2005, Chemical Name: Linear Alkylbenzene Sulfonate (LAS) including substance C10-13 Alkylbenzene sulfonic acid, sodium salt with CAS № 68411-30-3;
- K:** Amended Final Report on the Safety Assessment of Cocamide DEA, Journal of the American C~lkge of Toxicology 15(6):527-542, Lippmcott-Raven Publishers. Philadelphia 1996 Cosmetic Ingredient Review;
- L:** INVENTORY MULTI-TIERED ASSESSMENT AND PRIORITISATION (IMAP), HUMAN HEALTH TIER II ASSESSMENT FOR 1-PROPANAMINIUM, 3-AMINO-N-(CARBOXYMETHYL)-N,N-DIMETHYL-, N-COCO ACYL DERIVATIVES, HYDROXIDES, INNER SALTS (CAS NUMBER: 61789-40-0);
- M:** Safety Data Sheet dated 21/10/2013, version 1 Product trade name: STABILFOAM 300, Supplier: MAPEI S.p.A. -Via Cafiero 22 - Milan -ITALY;
- N:** Safety Data Sheet Issue date 10-March-2014 Version number 01, Trade name or designation of the mixture: SENSODYNE TOOTHPASTE (WITHOUT TITANIUM DIOXIDE), supplier of the safety data sheet: GlaxoSmithKline UK;
- O:** SDB n.: 452074 V000.0 Stampato: 14.06.2012, Identificatore del prodotto: Nelsen Lavanda e Aceto Bianco, Informazioni sul fornitore della scheda di dati di sicurezza: Henkel Italia S.p.A.;
- P:** SAFETY DATA SHEET Date of issue: 02.07.2013, Product name: MULTICOLOR COLORANT FS, Supplier/Manufacturer: Jotun Saudia Co Ltd;
- Q:** Sicherheitsdatenblatt Version: 8, überarbeitet am: 11.09.2013, Produktidentifikator - Handelsname: KDS NR 1, Hersteller/Lieferant: ZEP INDUSTRIES B.V.;
- R:** SDS No.: 47820 V004.2 printing date: 17.04.2014, Product identifier BONDERITE C-AD 0469 known as P3-emalan 0469;
- S:** Safety Data Sheet Revision Number: 006.0 Issue Date: 08/07/2014; Product identifier: Sweetheart Antibacterial Liquid Soap; Manufacturer: The Dial Corporation, a Henkel Company;

**T:** HERA - Human & Environmental Risk Assessment on ingredients of European household cleaning products Risk Assessment of Alcohol Ethoxysulphates, AES January 2003;

**U:** EPI System Summary CAS Number: 68603-42-9, CHEM: Amides, coco, N,N-bis(hydroxyethyl);

**V:** EPI System Summary CAS Number: 61789-40-0; CHEM: 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts;

**W:** EPI System Summary CAS Number: 068411-30-3; CHEM: ALKYL BENZENESULFONIC ACID, SODIUM SALT C10-C13;

**END**