

SAFETY DATA SHEET

ECOLAB®

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II (453/2010) - Europe

LIME-A-WAY EXTRA

Version : 2

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

1.1 Product identifier

Product name : LIME-A-WAY EXTRA
Product code : 103223E
Product use : Delimer
Product is for professional use only

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

Identified uses
Dishwash product. Automatic process Descaling agent. Manual process

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Distributor/ Importer : Ecolab Ltd.
David Murray John Building
UK-SN1 1NH Swindon, Wiltshire
England
Tel +44 (0)1793 511221
Fax +44 (0)1793 618552
CCS@ecolab.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : NOT AVAILABLE.

Manufacturer/ Distributor/ Importer

Telephone number : 01793 511221

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : C; R35
The classification of this product is based only on its extreme pH value (in accordance with current European legislation)

Physical/chemical hazards : Not applicable.

Human health hazards : Causes severe burns.

Environmental hazards : Not applicable.

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

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

2.2 Label elements

Hazard symbol or symbols :



Indication of danger : Corrosive

Date of issue/Date of revision : 10 March 2011

1/11

SECTION 2: Hazards identification

- Risk phrases** : R35- Causes severe burns.
- Safety phrases** : S2- Keep out of the reach of children.
 S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
 S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards

- Other hazards which do not result in classification** : Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
phosphoric acid	RRN: 01-2119485924-24 EC: 231-633-2 CAS: 7664-38-2 Index: 015-011-00-6	25-35	C; R34	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318	[1] [2]
Alkylethoxy-propoxylates	-	1-5	Xi; R38 N; R50 See section 16 for the full text of the R-phrases declared above	Skin Irrit. 2, H315 Aquatic Acute 1, H400 See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
 [2] Substance with a workplace exposure limit
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1207/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1207/2006, Annex XIII

SECTION 4: First aid measures**4.1 Description of first aid measures**

- Eye contact** : Get medical attention immediately. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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.

SECTION 4: First aid measures

- Skin contact** : Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. 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. Chemical burns must be treated promptly by a physician. 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed**Potential acute health effects**

- Eye contact** : Severely corrosive to the eyes. Causes severe burns.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Skin contact** : Severely corrosive to the skin. Causes severe burns.
- Ingestion** : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

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

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**5.1 Extinguishing media**

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

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:
phosphorus oxides

5.3 Advice for firefighters

Special precautions 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 proper protective equipment.

SECTION 6: Accidental release measures

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 spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

6.2 Environmental precautions : Avoid dispersal of spilt 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: : Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

Large spill : 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 (see section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide.

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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

SECTION 7: Handling and storage

- 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 30°C (50 to 86°F). Store in accordance with local regulations. 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. Separate from alkalis. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination.
- 7.3 Specific end use(s)**
- Recommendations** : Not applicable.
- Industrial sector specific solutions** : Not applicable.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. 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**

Product/ingredient name	Exposure limit values
phosphoric acid	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 2 mg/m ³ 15 minute(s). TWA: 1 mg/m ³ 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, 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 (EN 166)** : Goggles, face shield, or other full-face protection.
- Skin protection**

SECTION 8: Exposure controls/personal protection

Hand protection (EN 374)	: 1 - 4 hours : butyl rubber , nitrile rubber .
Body protection (EN 14605)	: 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.
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.
Respiratory protection (EN 143, 14387)	: A respirator is not needed under normal and intended conditions of product use.
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**9.1 Information on basic physical and chemical properties****Appearance**

Physical state	: Liquid.
Colour	: Green [Light]
Odour	: Odourless
Odour threshold	: Not determined for the mixture.
pH	: 0.2 to 0.5 [Conc. (% w/w): 100%]
Melting point/freezing point	: Not determined for the mixture.
Initial boiling point and boiling range	: Not determined for the mixture.
Flash point	: > 100°C
Evaporation rate	: Not determined for the mixture.
Flammability (solid, gas)	: Not determined for the mixture.
Burning time	: Not determined for the mixture.
Burning rate	: Not determined for the mixture.
Upper/lower flammability or explosive limits	: Not determined for the mixture.
Vapour pressure	: Not determined for the mixture.
Vapour density	: Not determined for the mixture.
Relative density	: 1.187 to 1.203
Solubility(ies)	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not determined for the mixture.
Auto-ignition temperature	: Not determined for the mixture.
Decomposition temperature	: Not determined for the mixture.
Viscosity	: Not determined for the mixture.
Explosive properties	: Not applicable.
Oxidising properties	: None.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 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** : Extremely reactive or incompatible with the following materials: organic materials, metals and alkalis.
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
phosphoric acid	LD50 Oral	Rat	1.25 g/kg	-
Alkylethoxy-propoxylates	LD50 Oral	Rat	>2000 mg/kg	-

Conclusion/Summary : Not determined for the mixture.

Irritation/Corrosion

Conclusion/Summary : Not determined for the mixture.

Sensitiser

Conclusion/Summary : Not determined for the mixture.

Mutagenicity

Conclusion/Summary : Not determined for the mixture.

Carcinogenicity

Conclusion/Summary : Not determined for the mixture.

Reproductive toxicity

Conclusion/Summary : Not determined for the mixture.

Teratogenicity

Conclusion/Summary : Not determined for the mixture.

Information on the likely routes of exposure : Not determined for the mixture.

Potential acute health effects

Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Ingestion : May cause burns to mouth, throat and stomach.

Skin contact : Severely corrosive to the skin. Causes severe burns.

Eye contact : Severely corrosive to the eyes. Causes severe burns.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion : Adverse symptoms may include the following:
stomach pains

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

SECTION 11: Toxicological information

Eye contact : Adverse symptoms may include the following:
 pain
 watering
 redness

Delayed and immediate effects and also chronic effects from short and long term exposure**Short term exposure**

Potential immediate effects : Not determined for the mixture.
Potential delayed effects : Not determined for the mixture.

Long term exposure

Potential immediate effects : Not determined for the mixture.
Potential delayed effects : Not determined for the mixture.

Potential chronic health effects

Conclusion/Summary : Not determined for the mixture.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.
Other information : Not determined for the mixture.

SECTION 12: Ecological information**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
Alkylethoxy-propoxylates	Acute EC50 0.1 to 1 mg/l	Aquatic plants	72 hours
	Acute EC50 1 to 10 mg/l	Daphnia	48 hours
	Acute LC50 0.1 to 1 mg/l	Fish - Brachydanio rerio	96 hours

Conclusion/Summary : Not determined for the mixture.

12.2 Persistence and degradability

Conclusion/Summary : The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC

12.3 Bioaccumulative potential

Conclusion/Summary : Not determined for the mixture.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not determined for the mixture.

Mobility : Not determined for the mixture.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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 local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : Yes.

European waste catalogue (EWC)





Waste code	Waste designation
20 01 14*	acids

Packaging

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

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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	UN1805	UN1805	UN1805	UN1805
14.2 UN proper shipping name	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION	Phosphoric acid, solution
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	No.	No.	No.
14.6 Special precautions for user	None.	None.	None.	None.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

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 authorisation****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**Ingredient declaration according to detergent regulation 648/2004/EC:**

<5% non-ionic surfactants

National regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations.
The Control of Substances Hazardous to Health Regulations.
Health and Safety at Work Act.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

☑ Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
Full text of abbreviated H statements	: H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H400 Very toxic to aquatic life.
Full text of classifications [CLP/GHS]	: Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4 Aquatic Acute 1, H400 AQUATIC TOXICITY (ACUTE) - Category 1 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 Skin Corr. 1A, H314 SKIN CORROSION/IRRITATION - Category 1A Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
Full text of abbreviated R phrases	: R34- Causes burns. R35- Causes severe burns. R38- Irritating to skin. R50- Very toxic to aquatic organisms.
Full text of classifications [DSD/DPD]	: C - Corrosive Xi - Irritant N - Dangerous for the environment
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Date of previous issue	: No previous validation
Version	: 2
Notice to reader	

SECTION 16: Other information

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, **NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.**