

Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

| Product name | : | Aquanomic Solid Soft |
|---------------------------------|---|-----------------------------------|
| Product code | : | 116722E |
| Use of the Substance/Mixture | : | Laundry softener |
| Substance type: | : | Mixture |
| | | For professional users only. |
| Product dilution information | : | No dilution information provided. |

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

| Identified uses | : | Conditioner (softener/starch). Automatic process |
|---------------------------------|---|--|
| Recommended restrictions on use | : | Reserved for industrial and professional use. |

1.3 Details of the supplier of the safety data sheet

| Company | : | Ecolab Ltd. PO Box 11; Winnington Avenue Northwich, Cheshire, United Kingdom CW8 4DX + 44 (0)1606 74488 ccs@ecolab.com |
|---------|---|--|
|---------|---|--|

1.4 Emergency telephone number

| Emergency telephone | : | +441618841235 |
|---------------------|---|----------------------------------|
| number | | +32-(0)3-575-5555 Trans-European |

Date of Compilation/Revision : 10.04.2019 Version : 1.4

Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

| Skin irritation, Category 2 | H315 |
|--------------------------------|------|
| Serious eye damage, Category 1 | H318 |

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms



| Signal Word : | Danger | |
|----------------------------|--------------------------------------|--|
| Hazard Statements | H315 H318 | Causes skin irritation. Causes serious eye damage. |
| Precautionary Statements : | Prevention: P280 | Wear protective gloves/ eye protection/ face protection. |
| | Response: P303 + P361 + P3 | IF ON SKIN (or hair): Take off immediately |
| | | all contaminated clothing. Rinse skin with water or shower. |
| | P310 | Immediately call a POISON CENTER/doctor. |

Hazardous components which must be listed on the label: Carboxylic acids, di-, C4-6

2.3 Other hazards

Do not mix with bleach or other chlorinated products - will cause chlorine gas.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

| Chemical Name | CAS-No. | Classification | Concentration: |
|------------------------------|----------------------|---------------------------------------|----------------|
| | EC-No. | REGULATION (EC) No 1272/2008 | [%] |
| | REACH No. | | |
| sodium chloride | 7647-14-5 | Not Classified; | >= 30 - < 50 |
| | 231-598-3 | | |
| | 01-2119485491-33 | | |
| tea-esterquats | 91995-81-2 | Skin irritation Category 2; H315 | >= 20 - < 25 |
| | 295-344-3 | Eye irritation Category 2; H319 | |
| | 01-2119463889-16 | | |
| Carboxylic acids, di-, C4-6 | 68603-87-2 | Serious eye damage Category 1; H318 | >= 5 - < 10 |
| | 271-678-5 | | |
| | 01-2119458864-25 | | |
| citric acid | 77-92-9 | Corrosive to metals Category 1; H290 | >= 3 - < 5 |
| | 201-069-1 | Eye irritation Category 2; H319 | |
| | 01-2119457026-42 | | |
| For the full text of the H-S | statements mentioned | in this Section, see Section 16. | |
| tion: 4. FIRST AID MEAS | SURES | · · · · · · · · · · · · · · · · · · · | |

4.1 Description of first aid measures

| In case of eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. |
|-------------------------|---|---|
| In case of skin contact | : | Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Get medical attention if irritation develops and persists. |
| If swallowed | : | Rinse mouth. Get medical attention if symptoms occur. |

| If inhaled | : | Remove to fresh air. Treat symptomatically. Get medical attention |
|------------|---|---|
| | | if symptoms occur. |

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of immediate medical attention and special treatment needed

| Treatment | |
|-----------|--|
| | |

: Treat symptomatically.

Section: 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

| Suitable extinguishing media | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|--------------------------------|---|---|
| Unsuitable extinguishing media | : | None known. |

5.2 Special hazards arising from the substance or mixture

| Specific hazards during firefighting | : Not flammable or combustible. |
|--------------------------------------|---|
| Hazardous combustion products | Depending on combustion properties, decomposition products may include following materials: Carbon oxides Sulphur oxides Hydrogen chloride metal oxides |

5.3 Advice for firefighters

| Special protective equipment for firefighters | : | Use personal protective equipment. |
|---|---|---|
| Further information | : | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. |

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

| Advice for non-emergency personnel | Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8. | |
|---------------------------------------|---|--|
| Advice 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. | |

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Sweep up and shovel into suitable containers for disposal.

6.4 Reference to other sections

See Section 1 for emergency contact information. For personal protection see section 8. See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

| Advice on safe handling | Avoid contact with skin and eyes. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not breathe dust. Do not mix with bleach or other chlorinated products – will cause chlorine gas. | |
|-------------------------|--|--|
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushin of the eyes and body in case of contact or splash hazard. | |

7.2 Conditions for safe storage, including any incompatibilities

| Requirements for storage areas and containers | : | Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. |
|---|---|---|
| Storage temperature | : | -30 °C to 30 °C |

7.3 Specific end uses

| Specific use(s) | : Conditioner (softener/starch). Automatic process |
|-----------------|--|
|-----------------|--|

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

| Appropriate engineering con | tro | bls |
|--------------------------------|-----|---|
| Engineering measures | : | Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
| Individual protection measures | | |
| Hygiene measures | : | Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing |

| | | of the eyes and body in case of contact or splash hazard. |
|--|---|---|
| Eye/face protection (EN 166) | : | Safety goggles Face-shield |
| Hand protection (EN 374) | : | Recommended preventive skin protection Gloves Nitrile rubber butyl-rubber Breakthrough time: 1 – 4 hours Minimum thickness for butyl-rubber 0.3 mm for nitrile rubber 0.2 mm or equivalent (please refer to the gloves manufacturer/distributor for advise). Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. |
| Skin and body protection (EN 14605) | : | No special protective equipment required. |
| Respiratory protection (EN 143, 14387) | : | When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:P |
| Environmental exposure controls | | |
| General advice | : | Consider the provision of containment around storage vessels. |

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Appearance | : Wax. |
|---|--|
| Colour | : opaque, light yellow |
| Odour | : not significant |
| рН | : 2.5 - 3.5, 1 % |
| Flash point | : Not applicable. |
| Odour Threshold | : Not applicable and/or not determined for the mixture |
| Melting point/freezing point | : Not applicable and/or not determined for the mixture |
| Initial boiling point and boiling range | : Not applicable and/or not determined for the mixture |
| Evaporation rate | : Not applicable and/or not determined for the mixture |
| Flammability (solid, gas) | : Not applicable and/or not determined for the mixture |
| Upper explosion limit | : Not applicable and/or not determined for the mixture |
| Lower explosion limit | : Not applicable and/or not determined for the mixture |
| Vapour pressure | : Not applicable and/or not determined for the mixture |
| Relative vapour density | : Not applicable and/or not determined for the mixture |
| Relative density | : 1.49 - 1.55 |

| Water solubility | : soluble |
|--|--|
| Solubility in other solvents | : Not applicable and/or not determined for the mixture |
| Partition coefficient: n- octanol/water | : Not applicable and/or not determined for the mixture |
| Auto-ignition temperature | : Not applicable and/or not determined for the mixture |
| Thermal decomposition | : Not applicable and/or not determined for the mixture |
| Viscosity, kinematic | : Not applicable and/or not determined for the mixture |
| Explosive properties | : Not applicable and/or not determined for the mixture |
| Oxidizing properties | : The substance or mixture is not classified as oxidizing. |

9.2 Other information

Not applicable and/or not determined for the mixture

Section: 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Do not mix with bleach or other chlorinated products - will cause chlorine gas.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials: Carbon oxides Sulphur oxides Hydrogen chloride metal oxides

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of : Eye contact, Skin contact exposure

Product

| Acute oral toxicity | : There is no data available for this product. |
|-----------------------------------|---|
| Acute inhalation toxicity | : There is no data available for this product. |
| Acute dermal toxicity | : There is no data available for this product. |
| Skin corrosion/irritation | : There is no data available for this product. |
| Serious eye damage/eye irritation | : There is no data available for this product. |
| Respiratory or skin sensitization | : There is no data available for this product. |
| Carcinogenicity | : There is no data available for this product. |
| Reproductive effects | : There is no data available for this product. |
| Germ cell mutagenicity | : There is no data available for this product. |
| Teratogenicity | : There is no data available for this product. |
| STOT - single exposure | : There is no data available for this product. |
| STOT - repeated exposure | : There is no data available for this product. |
| Aspiration toxicity | : There is no data available for this product. |
| Components | |
| Acute oral toxicity | : sodium chloride LD50 rat: 3,000 mg/kg |
| | Carboxylic acids, di-, C4-6 LD50 rat: 3,980 mg/kg |
| | citric acid LD50 rat: 11,700 mg/kg |
| Components | |
| Acute inhalation toxicity | : Carboxylic acids, di-, C4-6 4 h LC50 rat: 7.7 mg/l Test atmosphere: dust/mist |
| Components | |
| Acute dermal toxicity | : sodium chloride LD50 rabbit: > 10,000 mg/kg |
| | Carboxylic acids, di-, C4-6 LD50 rabbit: > 4,940 mg/kg |
| Potential Health Effects | |
| Eyes | : Causes serious eye damage. |
| Skin | : Causes skin irritation. |

| Ingestion | : Health injuries are not known or expected under normal use. | | |
|--------------------------------|---|--|--|
| Inhalation | : Health injuries are not known or expected under normal use. | | |
| Chronic Exposure | : Health injuries are not known or expected under normal use. | | |
| Experience with human exposure | | | |
| Eye contact | : Redness, Pain, Corrosion | | |
| Skin contact | : Redness, Irritation | | |
| Ingestion | : No symptoms known or expected. | | |
| Inhalation | : No symptoms known or expected. | | |

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

| Environmental Effects | : | This product has no known ecotoxicological effects. | |
|---|---|---|--|
| Product | | | |
| Toxicity to fish | : | no data available | |
| Toxicity to daphnia and other aquatic invertebrates | : | no data available | |
| Toxicity to algae | : | no data available | |
| Components | | | |
| Toxicity to fish | : | sodium chloride 96 h LC50 Fish: 5,840 mg/l | |
| | | Carboxylic acids, di-, C4-6 96 h LC50 Danio rerio (zebra fish): 59.5 mg/l | |
| | | citric acid 96 h LC50 Fish: > 100 mg/l | |
| Components | | | |
| Toxicity to daphnia and other aquatic invertebrates | : | Carboxylic acids, di-, C4-6 48 h EC50 Daphnia magna (Water flea): 46 mg/l | |
| Components | | | |
| Toxicity to algae | : | : tea-esterquats 72 h EC50: 0.93 mg/l | |
| | | Carboxylic acids, di-, C4-6 72 h EC50 Desmodesmus subspicatus (green algae): 41.9 mg/l | |

12.2 Persistence and degradability

Product

| Biodegradability | : The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC |
|------------------|--|
| | 648/2004/EC |

| Components | | | | |
|-----------------------------------|---|--|--|--|
| Biodegradability : | sodium chloride Result: Not applicable - inorganic | | | |
| | tea-esterquats Result: Biodegradable | | | |
| | Carboxylic acids, di-, C4-6 Result: Readily biodegradable. | | | |
| | citric acid Result: Readily biodegradable. | | | |
| 12.3 Bioaccumulative potential | | | | |
| no data available | | | | |
| 12.4 Mobility in soil | | | | |
| no data available | | | | |
| 12.5 Results of PBT and vPvB asse | essment | | | |
| Product | | | | |
| Assessment : | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. | | | |

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste.Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

| Product | : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. |
|-----------------------------------|---|
| Contaminated packaging | : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations. |
| Guidance for Waste Code selection | : Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in |

compliance with applicable European (EU Directive 2008/98/EC) and local regulations.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)

| 14.1 UN number | : Not dangerous goods |
|------------------------------|-----------------------|
| 14.2 UN proper shipping | : Not dangerous goods |
| name | |
| 14.3 Transport hazard | : Not dangerous goods |
| class(es) | |
| 14.4 Packing group | : Not dangerous goods |
| 14.5 Environmental hazards | : Not dangerous goods |
| 14.6 Special precautions for | : Not dangerous goods |
| user | |

Air transport (IATA)

| 14.1 UN number | : Not dangerous goods |
|------------------------------|-----------------------|
| 14.2 UN proper shipping | : Not dangerous goods |
| name | |
| 14.3 Transport hazard | : Not dangerous goods |
| class(es) | |
| 14.4 Packing group | : Not dangerous goods |
| 14.5 Environmental hazards | : Not dangerous goods |
| 14.6 Special precautions for | : Not dangerous goods |
| user | |

Sea transport (IMDG/IMO)

| 14.1 UN number | : Not dangerous goods |
|------------------------------|-----------------------|
| 14.2 UN proper shipping | : Not dangerous goods |
| name | |
| 14.3 Transport hazard | : Not dangerous goods |
| class(es) | |
| 14.4 Packing group | : Not dangerous goods |
| 14.5 Environmental hazards | : Not dangerous goods |
| 14.6 Special precautions for | : Not dangerous goods |
| user | |
| 14.7 Transport in bulk | : Not dangerous goods |
| according to Annex II of | |
| MARPOL 73/78 and the IBC | |
| Code | |

Section: 15. REGULATORY INFORMATION

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

| according to Detergents Regulation EC 648/2004 | : | 15 % or over but less than 30 %: Cationic surfactants less than 5 %: Anionic surfactants, Polycarboxylates Other constituents: Perfumes Allergens: Hexyl cinnamal |
|---|---|---|
| | | Hexyl cinnamai |
| | | |

Coumarin Alpha-Isomethyl Ionone

National Regulations

Take note of Dir 94/33/EC on the protection of young people at work.

Other 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

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

| Classification | Justification |
|----------------------------|--------------------|
| Skin irritation 2, H315 | Calculation method |
| Serious eye damage 1, H318 | Calculation method |

Full text of H-Statements

| H290 | May be corrosive to metals. |
|------|--------------------------------|
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |

Full text of other abbreviations

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM -American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL -Domestic Substances List (Canada); ECHA – European Chemicals Agency; EC-Number – European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS – Emergency Schedule; ENCS – Existing and New Chemical Substances (Japan); ErCx – Concentration associated with x% growth rate response; GHS – Globally Harmonized System; GLP – Good Laboratory Practice; IARC – International Agency for Research on Cancer; IATA – International Air Transport Association; IBC – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC – Inventory of Existing Chemical Substances in China; IMDG – International Maritime Dangerous Goods; IMO – International Maritime Organization; ISHL – Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 – Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD – Organization for Economic Co-operation and Development; OPPTS – Office of Chemical Safety and Pollution Prevention; PBT – Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European

Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID – Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA – Toxic Substances Control Act (United States); UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

Prepared by

: Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Annex: Exposure Scenarios

Exposure Scenario: Conditioner (softener/starch). Automatic process

| Life Cycle Stage | : | Use at industrial sites | |
|------------------|---|-------------------------|--|
| Product category | : | PC35 | Washing and cleaning products (including solvent based products) |

Contributing scenario controlling environmental exposure for:

| Environmental release category | : | ERC4 | Industrial use of processing aids in processes and products, not becoming part of articles |
|-----------------------------------|---|--------------|--|
| Daily amount per site | : | 50 kg | |
| Type of Sewage Treatment Plant | : | Municipal se | ewage treatment plant |

Contributing scenario controlling worker exposure for:

| Process category | : | PROC8b | Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities |
|---|---|--------|---|
| Exposure duration | : | 60 min | |
| Operational conditions and risk management measures | : | Indoor | |

Local Exhaust Ventilation is not required

| General ventilation | | Ventilation rate per hour 1 | | | | | | |
|--|---|---|--|---------|--|--|--|--|
| Skin Protection | : | Yes: See Section 8 | | | | | | |
| Respiratory Protection | : | No | | | | | | |
| | | | | | | | | |
| Contributing scenario controlling worker exposure for: | | | | | | | | |
| Process category | : | PROC2 | Use in closed, continuous process with occa controlled exposure | asional | | | | |
| Exposure duration | : | 480 min | | | | | | |
| Operational conditions and risk management measures | : | Indoor | | | | | | |
| | | Local Exhaust Ventilation is not required | | | | | | |
| General ventilation | | Ventilation rate per hour 1 | | | | | | |
| Skin Protection | : | No | | | | | | |
| Respiratory Protection | : | No | | | | | | |