

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

1.1 Product identifier

Product name	:	KitchenPro Manual
Product code	:	117573E
Use of the Substance/Mixture	:	Manual Warewashing Detergent
Substance type:	:	Mixture
		For professional users only.
Product dilution information	:	0.02 % - 0.04 %

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

Identified uses	:	Dishwash product. Manual 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
		ccs@ecolab.com

1.4 Emergency telephone number

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

Date of Compilation/Revision	:	21.05.2019
Version	:	1.0

Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Product AS SOLD	
Skin irritation, Category 2	H315
Serious eye damage, Category 1	H318
Chronic aquatic toxicity, Category 3	H412

Product AT USE DILUTION

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC Product AS SOLD Hazard pictograms) (No 1272/2008)	
Signal Word	:	Danger	
Hazard Statements	:	H315 H318 H412	Causes skin irritation. Causes serious eye damage. Harmful to aquatic life with long lasting effects.
Precautionary Statements	:	Prevention: P273 P280	Avoid release to the environment. Wear protective gloves/ eye protection/ face protection.
		Response: P305 + P351 + P3 P310	38 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
		F310	ininieulately call a POISON CENTER/000001.

Hazardous components which must be listed on the label: Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt

Product AT USE DILUTION

Not a hazardous substance or mixture.

2.3 Other hazards

Product AS SOLD

None known.
Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Product AS SOLD Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration: [%]
Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt	68891-38-3 500-234-8 01-2119488639-16	Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3; H412	>= 30 - < 50
1-Propanaminium, 3- amino-N-(carboxymethyl)- N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts	147170-44-3 01-2119489410-39	Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3; H412	>= 2.5 - < 3
Amides, C12-18 and C18- unsatd., N-(hydroxyethyl)	90622-77-8 292-481-0	Serious eye damage/eye irritation Category 1; H318	>= 1 - < 2.5

	01-2119489413-33	Skin corrosion/irritation Category 2; H315	
Substances with a workp	lace exposure limit :		
ethanol	64-17-5 200-578-6 01-2119457610-43	Flammable liquids Category 2; H225	>= 5 - < 10
butanone	78-93-3 201-159-0 01-2119457290-43	Flammable liquids Category 2; H225 Eye irritation Category 2; H319 Specific target organ toxicity - single exposure Category 3; H336	>= 0.1 - < 0.25

Product AT USE D	ILUTION	
Remarks	: No hazardous ingredients	
For the full text of the H-Statements mentioned in this Section, see Section 16.		
Section: 4. FIRST AID MEASURES		

4.1 Description of first aid measures

Product AS SOLD In case of eye contact	Rinse immediately with plenty of water, also under the e at least 15 minutes. Remove contact lenses, if present a to do. Continue rinsing. Get medical attention immediate	and easy
In case of skin contact	Wash off immediately with plenty of water for at least 15 Use a mild soap if available. Get medical attention if irrit develops and persists.	
If swallowed	Rinse mouth. Get medical attention if symptoms occur.	
If inhaled	Remove to fresh air. Treat symptomatically. Get medica if symptoms occur.	lattention

Product AT USE DILUTION In case of eye contact	:	Rinse with plenty of water.
In case of skin contact	:	Rinse with plenty of water.
If swallowed	:	Rinse mouth. Get medical attention if symptoms occur.
If inhaled	:	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

Product AS SOLD

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 fro	om the substance or mixture
Specific hazards during firefighting	 Fire Hazard Keep away from heat and sources of ignition. Flash back possible over considerable distance. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Hazardous combustion products	 Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides metal oxides
5.3 Advice for firefighters	
Special protective equipmen for firefighters	t : 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

A	Product AS SOLD Advice for non-emergency personnel	:	Ensure adequate ventilation. Remove all sources of ignition. 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 esponders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.
р Р	Product AT USE DILUTION Advice for non-emergency personnel Advice for emergency esponders	:	Refer to protective measures listed in sections 7 and 8. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.
F	Environmental precautions Product AS SOLD Environmental precautions	:	Do not allow contact with soil, surface or ground water.
-	Product AT USE DILUTION Environmental precautions	:	No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Product AS SOLD Methods for cleaning up	: Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.
Product AT USE DILUTION Methods for cleaning up	: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

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

Product AS SOLD	
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. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Wash hands thoroughly after handling. Open drum carefully as content may be under pressure. Do not breathe spray, vapour. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
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.
Product AT USE DILUTION	
	Wash hands after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). For personal protection see section 8.
Hygiene measures :	Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities

Product AS SOLD

Requirements for storage areas and containers	:	Keep away from heat and sources of ignition. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
Storage temperature	:	0 °C to 40 °C

Product AT USE DILUTION

Requirements for storage areas and containers	: Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

7.3 Specific end uses

Product AS SOLD		
Specific use(s)	:	Dishwash product. Manual process

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Product AS SOLD

Occupational Exposure Limits

Components	CAS-No.		Value type (Form of exposure)	Control parameters	Basis
ethanol	64-17-5	5	TWA	1,000 ppm 1,920 mg/m3	UKCOSSTD
Further information	2		no specific short-term exposure limit is listed, a figure three times the erm exposure should be used		
butanone	78-93-3		TWA	200 ppm 600 mg/m3	UKCOSSTD
Further information	Sk			in. The assigned substances are al absorption will lead to system	
			STEL	300 ppm 899 mg/m3	UKCOSSTD
Further information	Sk			in. The assigned substances are al absorption will lead to system	

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
Alkyl ketone	Proprietary	butan-2-one: 70 micromol per	After shift	GB EH40 BAT
, any notone	Ingredient	litre		OD EI HO BITT
		(Urine)		

DNEL

Linear(C12-C14)alkanol,	:	End Use: Workers
ethoxylated, sulfated, sodium		Exposure routes: Dermal
salt		Potential health effects: Long-term systemic effects
		End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 175 mg/m3

PNEC

Linear(C12-C14)alkanol,	:	Fresh water
ethoxylated, sulfated, sodium		Value: 0.24 mg/l
salt		

Marine water Value: 0.024 mg/l
Intermittent use/release Value: 0.071 mg/l
Sewage treatment plant Value: 10000 mg/l
Fresh water sediment Value: 5.45 mg/kg
Marine sediment Value: 0.545 mg/kg
Soil Value: 0.946 mg/kg

8.2 Exposure controls

Product AS SOLD Appropriate engineering controls

Engineering measures	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection measur	es	
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)	:	None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods

or procedures of work organization.

Product AT USE DILUTION Appropriate engineering controls				
Engineering measures	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.		
Individual protection measure	es			
Hygiene measures	:	Wash hands before breaks and immediately after handling the product.		
Eye/face protection (EN 166)	:	No special protective equipment required.		
Hand protection (EN 374)	:	No special protective equipment required.		
Skin and body protection (EN 14605)	:	No special protective equipment required.		
Respiratory protection (EN 143, 14387)	:	None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.		

Environmental exposure controls

General advice : Consid

: Consider the provision of containment around storage vessels.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

		Product AS SOLD	Product AT USE DILUTION
Appearance	:	liquid	liquid
Colour	:	clear, light yellow	colourless
Odour	:	not significant	very faint
рН	:	6.5 - 7.5, 100 %	7.2 - 7.5
Flash point	:	37 °C closed cup, Does not susta	in combustion.
Odour Threshold	:	Not applicable and/or not determi	ned for the mixture
Melting point/freezing point	:	Not applicable and/or not determi	ned for the mixture
Initial boiling point and boiling range	:	> 100 °C	
Evaporation rate	:	Not applicable and/or not determi	ned for the mixture
Flammability (solid, gas)	:	Not applicable and/or not determi	ned for the mixture
Upper explosion limit	:	Not applicable and/or not determi	ned for the mixture
Lower explosion limit	:	Not applicable and/or not determi	ned 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	: 1.05 - 1.06
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	: 280.000 mm2/s (40 °C)
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

Product AS SOLD 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

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides metal oxides

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product AS SOLD

Information on likely routes of : Inhalation, 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	:	Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt LD50 rat: 3,350 mg/kg
		1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N- (C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts LD50 rat: > 5,000 mg/kg
		ethanol LD50 rat: 10,470 mg/kg
		butanone LC50 rat: 2,193 mg/kg Test substance: Information given is based on data obtained from similar substances.
Components		
Acute inhalation toxicity	:	ethanol 4 h LC50 rat: 117 mg/l Test atmosphere: vapour
		butanone

Acute dermal toxicity i Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt LD50 rabbit: 8,000 mg/kg Acute dermal toxicity i Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt LD50 rabbit: 8,000 mg/kg C(B-18 and C18-unsatt. acyl) derivs., hydroxides, inner salts LD50 rat: > 2,000 mg/kg ethanol LD50 rabbit: > 15,800 mg/kg ethanol LD50 rabbit: > 15,800 mg/kg ethanol LD50 rabbit: > 15,800 mg/kg ethanol System causes serious eye damage. Skin causes skin irritation. Ingestion causes skin irritation. Instaltion ethanol Cronic Exposure ethanol Skin ethati hijuries are not known or expected under normal use. Inhalation ethati hijuries are not known or expected under normal use. Skin ethati hijuries are not known or expected under normal use. Skin ethati hijuries are not known or expected under normal use. Inhalation ethati hijuries are not known or expected under normal use. Skin contact ethati hijuries are not known or expected under normal use. Inhalation ethati hijuries are not known or expected under normal use. Skin contact ethati hijuries are not known or exp	chenPro Manual	
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LD50 rabbit: > 15,800 mg/kg butanone LD50 rat: > 8,050 mg/kg Protential Health Effects Product AS SOLD Eyes clauses serious eye damage. Skin clauses skin irritation. Ingestion i Inhalation i Chronic Exposure i Product AT USE DILUTION Eyes i By and the alth injuries are not known or expected under normal use. Name i Realth injuries are not known or expected under normal use. Skin i By and the alth injuries are not known or expected under normal use. Skin i Inhalation i Realth injuries are not known or expected under normal use. Inhalation i Reperimence with humane exposume i Skin contact i Redness, Pain, Corrosion		
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Eyes:Health injuries are not known or expected under normal use.Skin:Health injuries are not known or expected under normal use.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 expected with human expected under normal use.:Product AS SOLD:Redness, Pain, CorrosionSkin contact:Redness, IrritationIngestion:No symptoms known or expected.Inhalation:No symptoms known or expected.Skin contact:No symptoms known or expected.	Chronic Exposure	: Health injuries are not known or expected under normal use.
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:Health injuries are not known or expected under normal use.Product AS SOLD Eye contact:Redness, Pain, CorrosionSkin contact:Redness, IrritationIngestion:No symptoms known or expected.Inhalation:No symptoms known or expected.Skin contact:No symptoms known or expected.		
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 exposureProduct AS SOLDEye contact:Redness, Pain, CorrosionSkin contact:Redness, IrritationIngestion:No symptoms known or expected.Inhalation:No symptoms known or expected.Product AT USE DILUTION Eye contact:No symptoms known or expected.Skin contact:No symptoms known or expected.	Skin	: 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 exposureProduct AS SOLD Eye contact:Redness, Pain, CorrosionSkin contact:Redness, IrritationIngestion:No symptoms known or expected.Inhalation:No symptoms known or expected.Product AT USE DILUTION Eye contact:No symptoms known or expected.Skin contact:No symptoms known or expected.	Ingestion	: Health injuries are not known or expected under normal use.
Experience with human exposureProduct AS SOLD Eye contact: Redness, Pain, CorrosionSkin contact: Redness, IrritationIngestion: No symptoms known or expected.Inhalation: No symptoms known or expected.Product AT USE DILUTION Eye contact: No symptoms known or expected.Skin contact: No symptoms known or expected.	Inhalation	: Health injuries are not known or expected under normal use.
Product AS SOLD Eye contact: Redness, Pain, CorrosionSkin contact: Redness, IrritationIngestion: No symptoms known or expected.Inhalation: No symptoms known or expected.Product AT USE DILUTION Eye contact: No symptoms known or expected.Skin contact: No symptoms known or expected.Skin contact: No symptoms known or expected.	Chronic Exposure	: Health injuries are not known or expected under normal use.
Eye contact: Redness, Pain, CorrosionSkin contact: Redness, IrritationIngestion: No symptoms known or expected.Inhalation: No symptoms known or expected.Product AT USE DILUTION Eye contact: No symptoms known or expected.Skin contact: No symptoms known or expected.	Experience with human e	xposure
Ingestion: No symptoms known or expected.Inhalation: No symptoms known or expected.Product AT USE DILUTION Eye contact: No symptoms known or expected.Skin contact: No symptoms known or expected.		: Redness, Pain, Corrosion
Inhalation : No symptoms known or expected. Product AT USE DILUTION : No symptoms known or expected. Skin contact : No symptoms known or expected.	Skin contact	: Redness, Irritation
Product AT USE DILUTION Eye contact : No symptoms known or expected. Skin contact : No symptoms known or expected.	Ingestion	: No symptoms known or expected.
Eye contact: No symptoms known or expected.Skin contact: No symptoms known or expected.	Inhalation	: No symptoms known or expected.
Ingestion : No symptoms known or expected.	Skin contact	: No symptoms known or expected.
	Ingestion	: No symptoms known or expected.

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Inhalation		No symptoms known or expected		
	: No symptoms known or expected.			
ction: 12. ECOLOGICAL INFO	RM	ATION		
Product AS SOLD 1 Ecotoxicity				
Environmental Effects	:	Harmful to aquatic life with long lasting 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	:	Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt 96 h LC50 Fish: 7.1 mg/l		
		1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, I (C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts LC50 Pimephales promelas (fathead minnow): > 1 mg/l		
		ethanol 96 h LC50 Pimephales promelas (fathead minnow): > 100 mg/l		
		butanone 96 h LC50 Pimephales promelas (fathead minnow): 2,993 mg/l		
Components				
Toxicity to daphnia and other aquatic invertebrates	:	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, I (C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts EC50 Daphnia magna (Water flea): > 1 mg/l		
		butanone 48 h EC50 Daphnia magna (Water flea): 308 mg/l		
Components				
Toxicity to algae	:	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, I (C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts EC50 Desmodesmus subspicatus (green algae): > 1 mg/l		
		butanone 96 h EC50 Pseudokirchneriella subcapitata (algae): 2,029 mg/l		
2 Persistence and degradabil	ity			
Product				
Biodegradability	:	The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC		
Components				
Biodegradability		Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt		

Result: Readily biodegradable.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., hydroxides, inner salts Result: Readily biodegradable.

Amides, C12-18 and C18-unsatd., N-(hydroxyethyl) Result: Biodegradable

ethanol Result: Readily biodegradable.

butanone 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 assessment

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 AS SOLD Product	: The product should not be allowed to enter drains, water courses or the soil. 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
Contaminated packaging	 approved waste disposal facility. 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

	ermine the proper waste	rties of the material generated to e identification and disposal methods in e European (EU Directive 2008/98/EC)
Product AT USE DILUTION Product	ited product can be flue	hed to sanitary sewer if regulations
Tioudet	mit.	neu to sanitary sewer in regulations
Contaminated packaging	pose of in accordance v	with local, state, and federal regulations.

Section: 14. TRANSPORT INFORMATION

Product AS SOLD

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 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user	:	1170 ETHANOL SOLUTION 3 III No None
Air transport (IATA) 14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user	:	1170 Ethanol solution 3 III No None
Sea transport (IMDG/IMO) 14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	:	1170 ETHANOL SOLUTION 3 III No None Not applicable.

Section: 15. REGULATORY INFORMATION

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

according to Detergents	:	30 % and more: Anionic surfactants
Regulation EC 648/2004		less than 5 %: Amphoteric surfactants

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
Chronic aquatic toxicity 3, H412	Calculation method

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

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: Dishwash product. Manual process

Life Cycle Stage	:	Widespread use by professional workers		
Product category	:	PC35	Washing and cleaning products (including solvent based products)	

Contributing scenario controlling environmental exposure for:

Environmental release category	:	ERC8a	Wide dispersive indoor use of processing aids in open systems
Daily amount per site	:	7.5 kg	
Type of Sewage Treatment Plant	:	Municipal s	ewage treatment plant

Contributing scenario controlling worker exposure for:

Process category	:	PROC10	Roller application or brushing
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		
Contributing scenario contro	nillo	ng worker ex	kposure for:	
Process category	:	PROC8a	Transfer of substance or preparation (charg discharging) from/ to vessels/ large contain 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		