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

1.1 Product identifier

Product name : Diesin Maxx

Product code : 112798E

Use of the : Cleaner and disinfectant

Substance/Mixture

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 : Sanitary cleaner. Manual process

Surface disinfectant. 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

1.4 Emergency telephone number

Emergency telephone

number

: Food & Beverage, Institutional, Agriculture, Textile Hygiene:

Northwich: +44 (0)1606 74488

Healthcare Leeds: +44 (0)113 232 2480 Healthcare Swansea: +44 (0)1235 239670

Poison Information Centre

telephone number

: Not Available

Date of Compilation/Revision : 26.11.2015

version : 2.0

Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Category 1A H314
Chronic aquatic toxicity, Category 3 H412

The classification of this product is based only on its extreme pH value (in accordance with current European legislation).

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Classification (67/548/EEC, 1999/45/EC)

C: CORROSIVE R35

The classification of this product is based only on its extreme pH value (in accordance with current European legislation).

For the full text of the R-phrases mentioned in this Section, see Section 16. For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

正型

Signal Word : Danger

Hazard Statements : H314 Causes severe skin burns and eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements : Prevention:

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

all contaminated clothing. Rinse skin with

water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water

for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

Lactic acid

Benzalkonium chloride

Fattyalcohol ethoxylates > 5EO

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	Classification	Concentration:
	EC-No.	(67/548/EEC)	(REGULATION (EC) No	[%]
	REACH No.		1272/2008)	

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Lactic acid	79-33-4 201-196-2 01-2119474164-39	Xi; R38-R41	Skin irritation Category 2; H315 Serious eye damage Category 1; H318	>= 5 - < 10	
Benzalkonium chloride	68424-85-1 270-325-2	C-N; R22-R34- R50	Acute toxicity Category 4; H302 Skin corrosion Category 1B; H314 Serious eye damage Category 1; H318 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410	>= 1 - < 2.5	
Fattyalcohol ethoxylates > 5EO	69227-22-1	Xn; R20-R38- R41	Acute toxicity Category 4; H332 Skin irritation Category 2; H315 Serious eye damage Category 1; H318	>= 1 - < 2.5	
Substances with a workplace exposure limit :					
ethanol	64-17-5 200-578-6 01-2119457610-43	F; R11	Flammable liquids Category 2; H225	>= 0.5 - < 1	

For the full text of the R-phrases mentioned in this Section, see Section 16. 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

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. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention

immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give

anything by mouth to an unconscious person. Get medical

attention immediately.

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.

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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

: Decomposition products may include the following materials:

Carbon oxides

nitrogen oxides (NOx) Sulphur oxides

Oxides of phosphorus

5.3 Advice for firefighters

for firefighters

Special protective equipment : Use personal protective equipment.

Further information : Collect contaminated fire extinguishing water separately. This

> must not be discharged into drains. 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 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

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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

Advice on safe handling : Do not mix with bleach or other chlorinated products – will cause

chlorine gas.

Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. 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 flushing

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 : -5 °C to 40 °C

7.3 Specific end uses

Specific use(s) : Sanitary cleaner. Manual process

Surface disinfectant. Manual process

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
ethanol	64-17-5	TWA	1,000 ppm 1,920 mg/m3	UKCOSSTD

8.2 Exposure controls

Appropriate engineering controls

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations

below occupational exposure standards.

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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

Consult PPE manufacturer for the appropriate glove thickness

(depending on the type of gloves and its intended use).

Gloves should be discarded and replaced if there is any indication

of degradation or chemical breakthrough.

14605)

Skin and body protection (EN : Personal protective equipment comprising: suitable protective

gloves, safety goggles and protective clothing

Respiratory protection (EN

143, 14387)

: No special protective equipment required.

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 : liquid Colour : red

Odour Perfumes, fragrances

pΗ : 1.3 - 2.3, 100 % 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 : Not applicable and/or not determined for the mixture Vapour pressure Relative vapour density : Not applicable and/or not determined for the mixture

: 1.0165 - 1.0265 Relative density

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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

VOC : 0.05 %VOC content excluding water

0.05 %VOC content valid only for coating materials used on wood

surfaces

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

Bases

Metals

10.6 Hazardous decomposition products

Decomposition products may include the following materials:

Carbon oxides

nitrogen oxides (NOx)

Sulphur oxides

Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

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

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exposure

Toxicity

Acute oral toxicity : Acute toxicity estimate : > 2,000 mg/kg

Acute inhalation toxicity : 4 h Acute toxicity estimate : > 5 mg/l

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 : Lactic acid

LD50 rat: 3,543 mg/kg

Benzalkonium chloride LD50 rat: 344 mg/kg

Fattyalcohol ethoxylates > 5EO

LD50 rat: > 2,000 mg/kg

ethanol

LD50 rat: 10,470 mg/kg

Components

Acute inhalation toxicity : Lactic acid

4 h LC50 rat: > 7.94 mg/l

Fattyalcohol ethoxylates > 5EO

4 h LC50 rat: 3.5 mg/l

ethanol

4 h LC50 rat: 117 mg/l

Components

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Acute dermal toxicity : Lactic acid

LD50 rabbit: > 2,000 mg/kg

Benzalkonium chloride LD50 rabbit: 3,340 mg/kg

Fattyalcohol ethoxylates > 5EO LD50 rabbit: > 2,000 mg/kg

ethanol

LD50 rabbit: > 15,800 mg/kg

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Environmental Effects : Harmful to aquatic life with long lasting effects.

Product

Toxicity to fish : no data available

Toxicity to daphnia and other : no data available

aquatic invertebrates

Toxicity to algae : no data available

Components

Toxicity to fish : Lactic acid

96 h LC50 Fish: 130 mg/l

Fattyalcohol ethoxylates > 5EO

96 h LC50 Fish: 5 mg/l

ethanol

96 h LC50 Fish: 11,000 mg/l

Components

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Toxicity to daphnia and other : Benzalkonium chloride

aquatic invertebrates

48 h EC50: 0.016 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

Components

Biodegradability : Lactic acid

Result: Readily biodegradable.

Benzalkonium chloride Result: Biodegradable

Fattyalcohol ethoxylates > 5EO Result: Readily biodegradable.

ethanol

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 : 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

approved waste disposal facility.

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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.

European Waste Catalogue : 200114* - acids

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 goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group14.5 Environmental hazards14.6 Special precautions forNot dangerous goodsNot dangerous goods

user

Air transport (IATA)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for
14.6 Not dangerous goods
14.6 Not dangerous goods

ıser

Sea transport (IMDG/IMO)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group14.5 Environmental hazards14.6 Special precautions forNot dangerous goodsNot 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 : less than 5 %: Cationic surfactants, Non-ionic surfactants Regulation EC 648/2004 : Contains: Disinfectants

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Contains: Perfumes

Linalool

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

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

Highly flammable liquid and yengur

Section: 16. OTHER INFORMATION

Full text of R-Phrases

R11	Highly flammable.	
R20	Harmful by inhalation.	
R22	Harmful if swallowed.	
R34	Causes burns.	
R38	Irritating to skin.	
D 44	Diak of parious domas	

R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.

Full text of H-Statements

LIGOE

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects

Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; 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; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International

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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; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; 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; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS -Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances: NZIoC - New Zealand Inventory of Chemicals: TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

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

DPD+ Substances:

The following substances are the lead substances that contribute to the mixture Exposure Scenario according to the DPD+ Rule:

Route	Substance	CAS-No.	EINECS-No.
Ingestion	Benzalkonium chloride	68424-85-1	270-325-2
Inhalation	Fattyalcohol ethoxylates > 5EO	69227-22-1	
Dermal	Benzalkonium chloride	68424-85-1	270-325-2
Eyes	Lactic acid	79-33-4	201-196-2
aquatic environment	Benzalkonium chloride	68424-85-1	270-325-2

Physical properties DPD+ Substances:

Substance	Vapour pressure	Water solubility	Pow	Molar Mass
Benzalkonium chloride	< 0.0000001 hPa	403 g/l		

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Lactic acid	0.0041 hPa	0.25	

To calculate if your downstream Operating Conditions and Risk management Measures are safe, please calculate your risk factor at the website below:

www.ecetoc.org/tra

Short title of Exposure

Scenario

: Sanitary cleaner. Manual process

Use descriptors

Main User Groups : Professional uses: Public domain (administration, education,

entertainment, services, craftsmen)

Sectors of end-use : SU22: Professional uses: Public domain (administration,

education, entertainment, services, craftsmen)

Process categories : PROC10: Roller application or brushing

PROC8a: Transfer of substance or preparation (charging/discharging) from/ to vessels/ large containers at non-dedicated

facilities

Product categories : **PC35:** Washing and cleaning products (including solvent based

products)

Environmental Release

Categories

: **ERC8a:** Wide dispersive indoor use of processing aids in open

systems

Short title of Exposure

Scenario

: Surface disinfectant. Manual process

Use descriptors

Main User Groups : Professional uses: Public domain (administration, education,

entertainment, services, craftsmen)

Sectors of end-use : **SU22:** Professional uses: Public domain (administration,

education, entertainment, services, craftsmen)

Process categories : **PROC10:** Roller application or brushing

PROC8a: Transfer of substance or preparation (charging/

discharging) from/ to vessels/ large containers at non-dedicated

facilities

Product categories : **PC35:** Washing and cleaning products (including solvent based

products)

Environmental Release

Categories

: **ERC8a**: Wide dispersive indoor use of processing aids in open

systems

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