

**ECOBRITE PERFEKT****Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : ECOBRITE PERFEKT  
Product code : 112165E  
Use of the Substance/Mixture : Bleach  
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 : Laundry aid (gasing). 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 number : Food & Beverage, Institutional, Agriculture, Textile Hygiene:  
Northwich: +44 (0)1606 74488  
Healthcare Leeds: +44 (0)113 232 2480  
Healthcare Swansea: +44 (0)1252 717616  
Poison Information Centre telephone number : Not Available

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version : 1.0

**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Oxidizing liquids, Category 2	H272
Acute toxicity, Category 4	H302
Skin corrosion, Category 1A	H314
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335

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

C; CORROSIVE	R07
O; OXIDIZING	R20/22
The classification of this product is based only on its extreme pH value (in accordance with current European legislation).	R35
	R37

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 :



Signal Word : Danger

Hazard Statements	:	H272	May intensify fire; oxidiser.
		H302	Harmful if swallowed.
		H314	Causes severe skin burns and eye damage.
		H335	May cause respiratory irritation.

Precautionary Statements	:	<b>Prevention:</b>		
		P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
		P220	Keep/Store away from clothing/ combustible materials.	
		P221	Take any precaution to avoid mixing with combustibles.	
		P280	Wear protective gloves/ eye protection/ face protection.	
			<b>Response:</b>	
		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:  
 Hydrogen peroxide  
 Acetic acid  
 Peroxyacetic acid

**2.3 Other hazards**

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

**ECOBRITE PERFEKT****Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Hazardous components**

Chemical Name	CAS-No. EC-No. REACH No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration: [%]
Hydrogen peroxide	7722-84-1 231-765-0 01-2119485845-22	C-O-Xn; R35- R20/22-R05- R08	Nota B Oxidizing liquids Category 1; H271 Acute toxicity Category 4; H302 Acute toxicity Category 4; H332 Skin corrosion Category 1A; H314	>= 30 - < 35
Acetic acid	64-19-7 200-580-7 01-2119475328-30	C; R10-R35	Nota B Flammable liquids Category 3; H226 Skin corrosion Category 1A; H314	>= 2.5 - < 5
Peroxyacetic acid	79-21-0 201-186-8	Xn-C-N-O-Xi; R07-R10-R20- R21-R22-R35- R37-R50	Flammable liquids Category 3; H226 Organic peroxides Type D; H242 Acute toxicity Category 4; H302 Acute toxicity Category 4; H332 Acute toxicity Category 4; H312 Skin corrosion Category 1A; H314 Acute aquatic toxicity Category 1; H400 Specific target organ toxicity - single exposure Category 3; H335	>= 1 - < 2.5

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

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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.

**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 : Special protective equipment for firefighters  
Oxidizer. Contact with other material may cause fire.  
Oxidizer; material is an oxidizer which may readily react with other materials, especially upon heating.

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**

Special protective equipment for firefighters : In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

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

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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. Never soak up spilled or leaked acids and bases with sawdust, wood chips or similar materials. Isolate the waste do not allow it to come into contact with incompatible materials. For small spills contain with sand or vermiculite and dilute the contained product at least 10 times with water. Transfer to an open topped container and remove to a safe place for neutralization\* / disposal. For large spills contain spill and evacuate the area, leave until the reaction subsides, then collect up for disposal. Obtain consent from the local water company / authority if considering discharge to sewer. \*NEUTRALIZATION : once diluted, neutralize with a suitable alkali such as sodium bicarbonate.

**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 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 in a cool, well-ventilated place. Keep away from reducing agents. Keep away from strong bases. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers. Pressure bursts may occur due to gas evolution if the container is not adequately vented.

Storage temperature : 5 °C to 40 °C

**7.3 Specific end uses**

Specific use(s) : Laundry aid (gasing). Automatic process

**ECOBRITE PERFEKT****Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Occupational Exposure Limits**

CAS-No.	Components	Value type (Form of exposure)	Control parameters	Update	Basis
7722-84-1	Hydrogen peroxide	TWA	1 ppm 1.4 mg/m <sup>3</sup>	2005-04-06	UKCOSSTD
		STEL	2 ppm 2.8 mg/m <sup>3</sup>	2005-04-06	UKCOSSTD

**DNEL**

Hydrogen peroxide	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term - local Value: 3 mg/m <sup>3</sup>
		End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 1.4 mg/m <sup>3</sup>
peracetic acid	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 0.6 mg/m <sup>3</sup>
		End Use: Workers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 0.6 mg/m <sup>3</sup>
		End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 0.6 mg/m <sup>3</sup>
		End Use: Workers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 0.6 mg/m <sup>3</sup>
		End Use: Workers Exposure routes: Skin contact Potential health effects: Acute local effects Value: 0.12
		End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 0.6 mg/m <sup>3</sup>
		End Use: Consumers Exposure routes: Inhalation

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	Potential health effects: Acute systemic effects Value: 0.6 mg/m <sup>3</sup>
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 0.6 mg/m <sup>3</sup>
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 0.3 mg/m <sup>3</sup>

**PNEC**

peracetic acid	:	Fresh water Value: 0.000224 mg/l
		Fresh water sediment Value: 0.00018 mg/kg
		Water Value: 0.051 mg/l
		Soil Value: 0.32 mg/kg

**8.2 Exposure controls**

**Appropriate engineering controls**

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

**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) : Wear the following personal protective equipment:  
Nitrile rubber  
butyl-rubber  
Impervious gloves  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection (EN 14605) : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

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

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requirements(89/656/EEC, 89/686/EEC ), 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 : 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	: colourless
Odour	: vinegar-like
pH	: 0.7 - 1.0, 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
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	: 1.1 - 1.14
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	: Yes

**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.



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**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**

Direct sources of heat.  
Exposure to sunlight.

**10.5 Incompatible materials**

Metals  
Bases  
Organic materials

**10.6 Hazardous decomposition products**

Decomposition products may include the following materials:  
Carbon oxides  
nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides  
Oxides of phosphorus

**Section: 11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

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

**Toxicity**

Acute oral toxicity : Acute toxicity estimate : 1,546 mg/kg  
Acute inhalation toxicity : 4 h Acute toxicity estimate : > 20 mg/l  
Acute dermal toxicity : Acute toxicity estimate : > 2,000 mg/kg  
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.

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- 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 : Hydrogen peroxide  
LD50 rat: 486 mg/kg
- Acetic acid  
LD50 rat: 3,310 mg/kg
- Peroxyacetic acid  
LD50 rat: 1,634 mg/kg

**Components**

- Acute inhalation toxicity : Acetic acid  
4 h LC50 rat: > 40 mg/l
- Peroxyacetic acid  
4 h LC50 rat: 5.175 mg/l

**Components**

- Acute dermal toxicity : Peroxyacetic acid  
LD50 rat: 1,012 mg/kg

**Potential Health Effects**

- Eyes : Causes serious eye damage.
- Skin : Causes severe skin burns.
- Ingestion : Harmful if swallowed. Causes digestive tract burns.
- Inhalation : May cause respiratory tract irritation. 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**

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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 : Acetic acid  
96 h LC50: 75 mg/l  
  
Peroxyacetic acid  
96 h LC50: 0.8 mg/l

**Components**

Toxicity to daphnia and other aquatic invertebrates : Peroxyacetic acid  
48 h EC50: 0.73 mg/l

**Components**

Toxicity to algae : Hydrogen peroxide  
72 h EC50: 1.38 mg/l  
  
Peroxyacetic acid  
72 h EC50: 0.7 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 : Hydrogen peroxide  
Result: Not applicable.  
  
Acetic acid  
Result: Readily biodegradable.  
  
Peroxyacetic 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 assessment**

**Product**

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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.

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 : 3149  
14.2 UN proper shipping name : HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED  
14.3 Transport hazard class(es) : 5.1 (8)  
14.4 Packing group : II  
14.5 Environmental hazards : No  
14.6 Special precautions for user : None

**Air transport (IATA)**

14.1 UN number : 3149  
14.2 UN proper shipping name : Hydrogen peroxide and peroxyacetic acid mixture stabilized  
14.3 Transport hazard class(es) : 5.1 (8)  
14.4 Packing group : II  
14.5 Environmental hazards : No  
14.6 Special precautions for user : None

**Sea transport (IMDG/IMO)**

14.1 UN number : 3149

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14.2 UN proper shipping name : HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURE, STABILIZED  
14.3 Transport hazard class(es) : 5.1 (8)  
14.4 Packing group : II  
14.5 Environmental hazards : No  
14.6 Special precautions for user : 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**

according to Detergents Regulation EC 648/2004 : 30 % and more: Oxygen-based bleaching agents

**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.

**Section: 16. OTHER INFORMATION**

**Full text of R-Phrases**

R05 Heating may cause an explosion.  
R07 May cause fire.  
R08 Contact with combustible material may cause fire.  
R10 Flammable.  
R20 Harmful by inhalation.  
R20/22 Harmful by inhalation and if swallowed.  
R21 Harmful in contact with skin.  
R22 Harmful if swallowed.  
R35 Causes severe burns.  
R37 Irritating to respiratory system.  
R50 Very toxic to aquatic organisms.

**Full text of H-Statements**

H226 Flammable liquid and vapour.  
H242 Heating may cause a fire.  
H271 May cause fire or explosion; strong oxidiser.  
H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H332 Harmful if inhaled.

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H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.

**Full text of other abbreviations**

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	Hydrogen peroxide	7722-84-1	231-765-0
Inhalation	Hydrogen peroxide	7722-84-1	231-765-0
Dermal	Hydrogen peroxide	7722-84-1	231-765-0
Eyes	Hydrogen peroxide	7722-84-1	231-765-0
aquatic environment	Peroxyacetic acid	79-21-0	201-186-8

**Physical properties DPD+ Substances:**

Substance	Vapour pressure	Water solubility	Pow	Molar Mass
Hydrogen peroxide	2.99 hPa	100 g/l	0.0269	34.01 g/mol
Peroxyacetic acid	0.217 Pa			76.0 g/mol

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](http://www.ecetoc.org/tra)

**Short title of Exposure Scenario** : **Laundry aid (gasing). Automatic process**

**Use descriptors**

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- Main User Groups : Industrial uses: Uses of substances as such or in preparations at industrial sites
- Sectors of end-use : **SU3:** Industrial uses: Uses of substances as such or in preparations at industrial sites
- Process categories : **PROC2:** Use in closed, continuous process with occasional controlled exposure  
**PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities
- Product categories : **PC35:** Washing and cleaning products (including solvent based products)
- Environmental Release Categories : **ERC4:** Industrial use of processing aids in processes and products, not becoming part of articles