

SAC DESI EXTRA**Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : SAC DESI EXTRA

Product code : 113659E

Use of the
Substance/Mixture : Disinfectant

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 : Disinfection product. Semi-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 Export GmbH
Ecolab-Allee 1
40789 Monheim am Rhein, Germany +49 2173 599 1127
DEDUSEXPServices@ecolab.com**1.4 Emergency telephone number**Emergency telephone
number : 0049-2173-5991700 (24/7)Poison Information Centre
telephone number : +49 (0)551 19240Date of Compilation/Revision : 15.10.2014
Version : 1.1**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**Oxidizing liquids , Category 2 H272
Skin corrosion , Category 1A H314
Specific target organ toxicity - single exposure , Category 3,
Respiratory system H335**Classification (67/548/EEC, 1999/45/EC)**O; OXIDIZING R07
C; CORROSIVE R20/22
R35

SAC DESI EXTRA

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.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Precautionary Statements : **Prevention:**
P210 Keep away from heat.
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.
Response:
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ 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 or doctor/ physician.

Hazardous components which must be listed on the label:

Hydrogen peroxide
sulphuric acid
Peroxyacetic acid

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

SAC DESI EXTRA

Hydrogen peroxide	7722-84-1 231-765-0 01-2119485845-22	C-O-Xn; R35- R20/22-R05- R08	Oxidizing liquidsCategory 1; H271 Acute toxicityCategory 4; H302 Acute toxicityCategory 4; H332 Skin corrosionCategory 1A; H314	>= 20 - < 25
sulphuric acid	7664-93-9 231-639-5 01-2119458838-20	C; R35	Skin corrosionCategory 1A; H314	>= 10 - < 15
Acetic acid	64-19-7 200-580-7 01-2119475328-30	C; R10-R35	Flammable liquidsCategory 3; H226 Skin corrosionCategory 1A; H314	>= 5 - < 10
Peroxyacetic acid	79-21-0 201-186-8	Xn-C-N-O; R07-R10- R20-R21- R22-R35- R37-R50	Flammable liquidsCategory 3; H226 Organic peroxidesType F; H242 Acute toxicityCategory 4; H302 Acute toxicityCategory 4; H332 Acute toxicityCategory 4; H312 Skin corrosionCategory 1A; H314 Acute aquatic toxicityCategory 1; H400	>= 5 - < 10

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

SAC DESI EXTRA

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 : Oxidizer. Contact with other material may cause fire.

Hazardous combustion products : Decomposition products may include the following materials:
Carbon oxides
nitrogen oxides (NO_x)
Sulphur oxides
Oxides of phosphorus

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 : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth,

SAC DESI EXTRA

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

- 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.
- Storage temperature : -20 °C to 30 °C

7.3 Specific end uses

- Specific use(s) : Disinfection product. Semi-automatic process

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
7664-93-9	sulphuric acid	AGW (Inhalable fraction)	0.1 mg/m ³	2011-12-19	TRGS 900
64-19-7	Acetic acid	AGW	10 ppm 25 mg/m ³	2010-08-04	TRGS 900

DNEL

SAC DESI EXTRA

Hydrogen peroxide	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term - local Value: 3 mg/m ³
		End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 1.4 mg/m ³
peracetic acid	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 0.6 mg/m ³
		End Use: Workers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 0.6 mg/m ³
		End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 0.6 mg/m ³
		End Use: Workers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 0.6 mg/m ³
		End Use: Workers Exposure routes: Skin contact Potential health effects: Acute local effects Value: 0.12
		End Use: Consumer use Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 0.6 mg/m ³
		End Use: Consumer use Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 0.6 mg/m ³
		End Use: Consumer use Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 0.6 mg/m ³
		End Use: Consumer use Exposure routes: Inhalation Potential health effects: Acute local effects Value: 0.3 mg/m ³

PNEC

peracetic acid	:	Fresh water Value: 0.000224 mg/l
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SAC DESI EXTRA

		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 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 : pungent

SAC DESI EXTRA

pH	: 0.5, 100 %
Flash point	: > 100 °C, Sustains combustion
Odour Threshold	: no data available
Melting point/freezing point	: no data available
Initial boiling point and boiling range	: > 100 °C
Evaporation rate	: no data available
Flammability (solid, gas)	: no data available
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 1.17 - 1.19
Water solubility	: soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, kinematic	: no data available
Explosive properties	: no data available
Oxidizing properties	: Yes

9.2 Other information

no data available

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

Metals
Bases
Organic materials

SAC DESI EXTRA

10.6 Hazardous decomposition products

Decomposition products may include the following materials:

Carbon oxides
nitrogen oxides (NO_x)
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 : > 2,000 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.

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.

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

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

SAC DESI EXTRA

Peroxyacetic acid
4 h LC50 rat: 5.175 mg/l

Acute dermal toxicity : Acetic acid
LD50 rabbit: 1,060 mg/kg

Peroxyacetic acid
LD50 rat: 1,012 mg/kg

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : 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

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 : sulphuric acid
96 h LC50: 22 mg/l

Acetic acid
96 h LC50: 75 mg/l

Peroxyacetic acid
96 h LC50: 0.8 mg/l

SAC DESI EXTRA

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

no data available

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 : 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.

European Waste Catalogue : 200114* - acids

Section: 14. TRANSPORT INFORMATION

SAC DESI EXTRA

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 : 3098
14.2 UN proper shipping name : OXIDIZING LIQUID, CORROSIVE, N.O.S.
(Hydrogen peroxide, Peroxyacetic acid, Sulphuric acid)
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 : 3098
14.2 UN proper shipping name : Oxidizing liquid, corrosive, n.o.s.
(Hydrogen peroxide, Peroxyacetic acid, Sulphuric acid)
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 : 3098
14.2 UN proper shipping name : OXIDIZING LIQUID, CORROSIVE, N.O.S.
(Hydrogen peroxide, Peroxyacetic acid, Sulphuric acid)
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 : 15 % or over but less than 30 %: Oxygen-based bleaching agents
Other constituents: Disinfectants

National Regulations

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

Hazard class for water : WGK 2
Classification according VwVwS, Annex 4.

SAC DESI EXTRA

German storage class : 5.1B

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.
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.
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SAC DESI EXTRA

Ingestion	Peroxyacetic acid	79-21-0	201-186-8
Inhalation	Acetic acid	64-19-7	200-580-7
Dermal	Peroxyacetic acid	79-21-0	201-186-8
Eyes	Peroxyacetic acid	79-21-0	201-186-8
aquatic environment	Peroxyacetic acid	79-21-0	201-186-8

Physical properties DPD+ Substances:

Substance	Vapour pressure	Water solubility	Pow	Molar Mass
Peroxyacetic acid	0.217 Pa			76.0 g/mol
Acetic acid	2.079 kPa			60.06 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

Short title of Exposure Scenario : **Disinfection product. Semi-automatic process**

Use descriptors

- 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 : **PROC4:** Use in batch and other process (synthesis) where opportunity for exposure arises
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