

SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name or designation of the mixture 5000-Sc Cleaning Solution

Registration number -

Synonyms None.

SDS number 001

Date of first issue 24-February-2011

Version number 01

Revision date -

Supersedes date -

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

Identified uses Cleaning Agent.

Uses advised against None known.

Details of the supplier of the safety data sheet

Supplier

Company name Orbio Technologies

Address 4232 Park Glen Rd, Minneapolis, MN 55416
USA

e-mail reid.rabon@tenantco.com

Contact person Not available.

Emergency telephone number +001-703-527-3887 (24hr)

Section 2: Hazards identification

Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Not classified for health hazards.

Environmental hazards Not classified for hazards to the environment.

Specific hazards No hazards resulting from the material as supplied. However: Direct contact with eyes may cause temporary irritation. Prolonged contact may cause dryness of the skin.

Main symptoms None known.

Label elements

Label according to Directive 67/548/EEC or 1999/45/EC as amended

Contains: Sodium hydroxide

Supplemental label information None.

Other hazards Not assigned.

Section 3: Composition/information on ingredients

Mixture

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
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Water	>99.95	7732-18-5 231-791-2	-	-	
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Classification: -

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Sodium hydroxide	<0.05	1310-73-2 215-185-5	-	011-002-00-6	#
Classification:	C;R35				

#: This substance has workplace exposure limit(s).

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all R-phrases is displayed in Section 16.

Section 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Description of first aid measures

Inhalation Move to fresh air. Get medical attention if any discomfort occurs.

Skin contact Wash contact areas with soap and water. Get medical attention if irritation develops or persists.

Eye contact Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.

Most important symptoms and effects, both acute and delayed None known.

Indication of any immediate medical attention and special treatment needed Treat symptomatically.

Section 5: Firefighting measures

General fire hazards Not available.

Extinguishing media

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media No restrictions known.

Special hazards arising from the substance or mixture No unusual fire or explosion hazards noted.

Advice for firefighters

Special protective equipment for firefighters Not available.

Special firefighting procedures Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

For emergency responders Not available.

Environmental precautions No special environmental precautions required

Methods and material for containment and cleaning up Extinguish all flames in the vicinity.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Small Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Cover with plastic sheet to prevent spreading. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination. Wipe up with absorbent material (e.g. cloth, fleece).

Never return spills in original containers for re-use. None necessary. For waste disposal, see Section 13. Absorb spillage with suitable absorbent material.

Never return spills to original containers for re-use.

Reference to other sections Not available.

Section 7: Handling and storage

Precautions for safe handling	Handle and open container with care. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original container. Store in sealed containers to maintain efficacy of solution. See technical bulletin for specific container storage information.
Specific end use(s)	Not available.

Section 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Sodium hydroxide (1310-73-2)	STEL	2 mg/m ³

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

DNEL Not available.

PNEC Not available.

Exposure controls

Appropriate engineering controls No particular ventilation requirements. Make sure to provide adequate control by applying the "COSHH Essentials" procedure.

Individual protection measures, such as personal protective equipment

General information Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Glasses are not required. Independent testing has shown the 5000-Sc output is non-irritating. Wear approved safety glasses as a good hygiene practice.

Skin protection

- Hand protection Gloves are not required. Independent testing has shown the 5000-Sc output is non-irritating. Wear suitable gloves as a good hygiene practice.

- Other Gloves are not required. Independent testing has shown the 5000-Sc output is non-irritating. Wear suitable gloves as a good hygiene practice.

Respiratory protection No specific recommendations.

Thermal hazards Not available.

Hygiene measures Wash hands after handling.

Environmental exposure controls Environmental manager must be informed of all major spillages.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance Clear, colorless liquid.

Physical state Liquid.

Form Liquid.

Colour Colourless.

Odour Odourless.

Odour threshold Not available.

pH 10 - 11.5

Melting point/freezing point 0 °C (32 °F)

Boiling point, initial boiling point, and boiling range 100 °C (212 °F)

Flash point > 93 °C (> 199.4 °F) Closed cup

Auto-ignition temperature Not applicable.

Flammability (solid, gas) Not available.

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Oxidising properties	Not applicable.
Explosive properties	Not applicable.
Explosive limit	Not applicable.
Vapour pressure	0.0212 atm
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Relative density	0.999
Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Bulk density	1000 kg/m ³
Viscosity	1.002 cSt
Percent volatile	Not available.
Other information	No relevant additional information available.

Section 10: Stability and reactivity

Reactivity	Not available.
Chemical stability	This product is stable under expected conditions of use.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Freezing. Excessive heat.
Incompatible materials	None known.
Hazardous decomposition products	None known.

Section 11: Toxicological information

General information	Not available.
Information on likely routes of exposure	
Ingestion	Not available.
Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Symptoms	None known.
Information on toxicological effects	
Acute toxicity	Under normal conditions of intended use, this material does not pose a risk to health. However: Direct contact with eyes may cause temporary irritation. Prolonged contact may cause dryness of the skin.
Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Not available.
Respiratory sensitisation	Not available.
Skin sensitisation	Not available.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not available.
Aspiration hazard	Not available.
Mixture versus substance information	Not available.
Other information	Not available.

Section 12: Ecological information

Toxicity

Components	Test results
Sodium hydroxide (1310-73-2)	EC50 Water flea (Ceriodaphnia dubia): 34.59 - 47.13 mg/l 48 hours LC50 Western mosquitofish (Gambusia affinis): 125 mg/l 96 hours
Persistence and degradability	The product is biodegradable.
Bioaccumulative potential	Not expected to bioaccumulate on the basis of the low octanol-water partition coefficient.
Mobility	Not available.
Environmental fate - Partition coefficient	Not available.
Mobility in soil	Not available.
Results of PBT and vPvB assessment	Not available.
Other adverse effects	Not available.

Section 13: Disposal considerations

Waste treatment methods

Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	No special precautions.
EU waste code	16 05 09
Disposal methods/information	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Section 14: Transport information

ADR

The product is not covered by international regulation on the transport of dangerous goods.

RID

The product is not covered by international regulation on the transport of dangerous goods.

ADN

The product is not covered by international regulation on the transport of dangerous goods.

IATA

The product is not covered by international regulation on the transport of dangerous goods.

IMDG

The product is not covered by international regulation on the transport of dangerous goods.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code No information available.

Section 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Not listed.

Other regulations	The product does not need to be labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
National regulations	Not available.
Chemical safety assessment	Not available.

Section 16: Other information

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Wording of the R-phrases in sections 2 and 3	R35 Causes severe burns.
Training information	Not available.
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
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