

Material Safety Data Sheet



APEX MANUAL DETERGENT

Section 1. Chemical product and company identification

Trade name : APEX MANUAL DETERGENT
Product use : Manual Warewashing Detergent
Supplier : Ecolab Co.
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326
Code : 999174-02
Date of issue : 07-May-2009

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Hazards identification

Physical state : Solid. [Extruded solid.]
Emergency overview : CAUTION !
MAY CAUSE EYE IRRITATION.
MAY BE HARMFUL IF SWALLOWED.
Do not ingest. Avoid contact with eyes. Wash thoroughly after handling.
Routes of entry : Skin contact, Eye contact, Ingestion

Potential acute health effects

Eyes : Slightly irritating to the eyes.
Skin : Slightly irritating to the skin.
Inhalation : No known significant effects or critical hazards.
Ingestion : May be harmful if swallowed.

See toxicological information (section 11)

Section 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
SODIUM DODECYLBENZENESULFONATE	25155-30-0	30 - 60
poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-hydroxy-, c10-16-alkyl ethers, sodium salts	68585-34-2	7 - 13
SODIUM ACETATE	127-09-3	5- 10
LAURAMIDE MEA	142-78-9	3 - 7
COCAMIDE MEA	68140-00-1	3 - 7
LAURYL POLYGLUCOSE	110615-47-9	1 - 5
SODIUM SILICATE	1344-09-8	1 - 5

Section 4. First-aid measures

Eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses and flush again. Get medical attention if irritation occurs.
Skin contact : Flush contaminated skin with plenty of water. Wash clothing before reuse.
Inhalation : If inhaled, remove to fresh air.
Ingestion : Rinse mouth; then drink one or two large glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire-fighting measures

Auto-ignition temperature	: Not available.
Flash point	: > 100°C Product does not support combustion.
Flammable limits	: Not available.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
Fire-fighting media and instructions	: Use an extinguishing agent suitable for the surrounding fire. Dyke area of fire to prevent runoff. No specific fire or explosion hazard.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Risk of explosion of the product in the presence of mechanical impact: Not available.

Risk of explosion of the product in the presence of static discharge: Not available.

Section 6. Accidental release measures

Personal precautions	: Use suitable protective equipment (section 8). Do not allow to enter drains or watercourses.
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Methods for cleaning up	: Use a tool to scoop up solid or absorbed material and place into appropriate labelled waste container.

Section 7. Handling and storage

Handling	: Do not ingest. Avoid contact with eyes. Wash thoroughly after handling.
Storage	: Keep out of reach of children. Keep container in a cool, well-ventilated area. Keep container tightly closed. Do not store above the following temperature: 50°C

Section 8. Exposure controls/personal protection

Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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Personal protection :

Eyes	: No protective equipment is needed under normal use conditions.
Hands	: No protective equipment is needed under normal use conditions.
Skin	: No protective equipment is needed under normal use conditions.
Respiratory	: A respirator is not needed under normal and intended conditions of product use.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state	: Solid. [Extruded solid.]
Colour	: Purple. [Light]
Odour	: citrus
pH	: 7.5 to 8.5 [Conc. (% w/w): 1%]
Boiling/condensation point	: Not available.
Melting/freezing point	: Not available.
Relative density	: 1.1
Vapour pressure	: Not available.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK _{ow}	: Not available.
Solubility	: Soluble in the following materials: cold water and hot water.

Section 10. Stability and reactivity

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions of instability	: Not available.
Reactivity	: Not available.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerisation	: Under normal conditions of storage and use, hazardous polymerisation will not occur.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Slightly irritating to the eyes.
Skin	: Slightly irritating to the skin.
Inhalation	: No known significant effects or critical hazards.
Ingestion	: May be harmful if swallowed.

Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: No known significant effects or critical hazards.
Reproductive effects	: No known significant effects or critical hazards.
Sensitization to Product	: No known significant effects or critical hazards.
Synergistic products (toxicologically)	: Not available.

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Route</u>	<u>Result</u>	<u>Species</u>
sodium dodecylbenzene sulfonate	LD50	Oral	438 mg/kg	Rat
	LD50	Oral	1330 mg/kg	Mouse
acetic acid, sodium salt	LD50	Oral	6891 mg/kg	Mouse
	LD50	Oral	3530 mg/kg	Rat
silicic acid, sodium salt	LD50	Dermal	>4640 mg/kg	Rabbit
	LD50	Oral	1960 mg/kg	Rat
Target organs	: Not available.			

Section 12. Ecological information

Ecotoxicity

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
sodium dodecylbenzene sulfonate	Daphnia - Water flea - Neonate - <24 hours	48 hours	Acute EC50 7.81 to 14.51 mg/L Fresh water
	Daphnia - Water flea	48 hours	Acute EC50 5.88 ppm Fresh water
	Daphnia - Water flea - Neonate - <24 hours	48 hours	Acute LC50 9.546 to 9.6 mg/L Fresh water
	Fish - Rainbow trout,donaldson trout	96 hours	Acute LC50 1.68 ppm Fresh water
	Fish - Bluegill	96 hours	Acute LC50 1.18 ppm Fresh water
	Fish - Catfish - 12 to 16 cm	96 hours	Acute LC50 6900 ug/L Fresh water
	Fish - Bluegill - Young of the year	96 hours	Acute LC50 6500 ug/L Fresh water
	Fish - Rainbow trout,donaldson trout - Juvenile (Fledgling, Hatchling, Weanling)	96 hours	Acute LC50 3200 to 5600 ug/L Fresh water
	Daphnia - Water flea	48 hours	Acute LC50 19870 ug/L Fresh water
	Fish - Catfish - 12 to 16 cm	96 hours	Acute LC50 7160 ug/L Fresh water
	Fish - Catfish - 12 to 16 cm	96 hours	Acute LC50 7079 to 7638 ug/L Fresh water
	Fish - Catfish - 12 to 16 cm	96 hours	Acute LC50 6969 to 7614 ug/L Fresh water
	Fish - Catfish - 12 to 16 cm	96 hours	Acute LC50 6926 to 7346 ug/L Fresh water
	Daphnia	48 hours	Acute EC50 4857 mg/L
	Fish	96 hours	Acute LC50 3185 mg/L
	Fish	96 hours	Acute LC50 2320 mg/L
silicic acid, sodium salt	Daphnia	48 hours	Acute EC50 4857 mg/L
	Fish	96 hours	Acute LC50 3185 mg/L
	Fish	96 hours	Acute LC50 2320 mg/L

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

UN Classification Not regulated.

See shipping documents for specific transportation information.

Section 15. Regulatory information

WHMIS : Class D-2B: Material causing other toxic effects (Toxic).

Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

Section 16. Other information

Hazardous Material Information System (U.S.A.) :	Health	*	1
	Flammability		0
	Physical hazards		0

Date of issue : 07-May-2009.

Responsible name : Regulatory Affairs
1-800-352-5326

Date of previous issue : 27-January-2009.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.