

Material Safety Data Sheet



APEX POWER

Section 1. Chemical product and company identification

Trade name : APEX POWER
Product use : Machine Warewashing Detergent
Supplier : Ecolab Co.
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326
Code : 905284
Date of issue : 30-June-2007

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

Section 2. Composition, information on ingredients

| <u>Name</u> | <u>CAS number</u> | <u>% by weight</u> |
|--|-------------------|--------------------|
| sodium carbonate | 497-19-8 | 40 - 70 |
| triphosphoric acid, pentasodium salt | 7758-29-4 | 5- 10 |
| phosphonic acid, (1-hydroxyethylidene)bis-, potassium salt | 67953-76-8 | 5- 10 |
| alcohols, c12-14, ethoxylated propoxylated | 68439-51-0 | 1 - 5 |
| troclosene sodium, dihydrate | 51580-86-0 | 1 - 5 |

Section 3. Hazards identification

Physical state : Solid. [Solid.]

Emergency overview : CAUTION !

MAY CAUSE EYE IRRITATION.

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 : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

See toxicological information (section 11)

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 persists.

Skin contact : Flush contaminated skin with plenty of water. Wash clothing before reuse.

Inhalation : If inhaled, remove to fresh air.

Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. If irritation persists, get medical attention.

Section 5. Fire-fighting measures

Auto-ignition temperature : Not available.

Flash point : > 100°C

Flammable limits : Not available.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
phosphorus 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). It will result in little or no hazard if spilt.
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : Collect spillage. Avoid creating dusty conditions and prevent wind dispersal.

Section 7. Handling and storage

- Handling** : Wash thoroughly after handling.
- Storage** : Keep out of reach of children. Keep container in a cool, well-ventilated area.
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.

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.

Name

chlorine

Exposure limits

ACGIH TLV (United States, 1/2006).

STEL: 2.9 mg/m³ 15 minute(s).

STEL: 1 ppm 15 minute(s).

TWA: 1.5 mg/m³ 8 hour(s).

TWA: 0.5 ppm 8 hour(s).

Section 9. Physical and chemical properties

- Physical state** : Solid. [Solid.]
- Colour** : White.
- Odour** : chlorine
- pH** : 11.1 [Conc. (% w/w): 1%]
- Boiling/condensation point** : Not available.
- Melting/freezing point** : Not available.
- Vapour pressure** : Not available.

| | |
|--------------------|--|
| Vapour density | : Not available. |
| Odour threshold | : Not available. |
| Evaporation rate | : Not available. |
| LogK _{ow} | : Not available. |
| Solubility | : Easily 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 | : Slightly reactive to reactive with acids, alkalis. Mixing this product with acid or ammonia releases chlorine gas. Do not allow water to enter container. Wet material may generate halogenated gas that may pressurize sealed containers. |
| 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 | : No known significant effects or critical hazards. |
| Inhalation | : No known significant effects or critical hazards. |
| Ingestion | : No known significant effects or critical hazards. |

Potential chronic health effects

Carcinogenic effects : No known significant effects or critical hazards.

| <u>Ingredient name</u> | <u>ACGIH</u> | <u>IARC</u> | <u>NTP</u> | <u>OSHA</u> |
|------------------------|--------------|-------------|------------|-------------|
| Not applicable. | | | | |

| | |
|---|---|
| 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 carbonate | LD50 | Dermal | >2000 mg/kg | Rabbit |
| | LD50 | Oral | 6600 mg/kg | Mouse |
| | LD50 | Oral | 4090 mg/kg | Rat |
| | LC50 | Inhalation | 2300 mg/m ³ | Rat |
| triphosphoric acid, pentasodium salt | LD50 | Dermal | >4640 mg/kg | Rabbit |
| | LD50 | Oral | 3120 mg/kg | Rat |
| | LD50 | Oral | 3100 mg/kg | Mouse |
| | LC50 | Inhalation | 0.39 mg/L | Rat |

Target organs : Not available.

Section 12. Ecological information

Ecotoxicity

| <u>Ingredient name</u> | <u>Species</u> | <u>Period</u> | <u>Result</u> |
|--------------------------------------|---|---------------|---|
| sodium carbonate | Daphnia | 48 hours | Acute EC50 347 mg/L |
| | Fish | 96 hours | Acute LC50 740 mg/L |
| | Fish | 96 hours | Acute LC50 <850 mg/l |
| | Fish | 96 hours | Acute LC50 320 mg/l |
| | Fish | 96 hours | Acute LC50 300 mg/l |
| triphosphoric acid, pentasodium salt | Daphnia | 48 hours | Acute EC50 >100 mg/L |
| | Fish | 96 hours | Acute LC50 >1600 mg/L |
| troclosene sodium, dihydrate | Fish | 96 hours | Acute LC50 >100 mg/L |
| | Daphnia - Water flea - | 48 hours | Acute EC50 0.28 to |
| | Daphnia magna | | 0.36 ppm Fresh water |
| | Fish - Bluegill - Lepomis macrochirus | 96 hours | Acute LC50 0.46 to 1 ppm Fresh water |
| | Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss | 96 hours | Acute LC50 0.25 to 0.36 ppm Fresh water |

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised wherever possible. Collect spillage. 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).

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

Date of issue : 30-June-2007.
Responsible name : Regulatory Affairs
 1-800-352-5326
Date of previous issue : 30-May-2007.
Notice to reader

Section 16. Other information

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.**