

Material Safety Data Sheet

Section 1 Product Identification

Product Name: **Special Cyclone**

Formula type: alkaline liquid detergent

Manufacturer's Name:

Chem-Tech, Inc.

6551 Jansen Avenue NE – Suite 106

Albertville, MN 55301

Emergency Telephone: 1-800-535-5053 (Infotrac)

Information: 763-417-1380

Fax: 763-417-1389

Section 2 Chemical Ingredients

| <u>Chemical Name</u> | <u>CAS#</u> | <u>%</u> | <u>Threshold Limit Value</u> | <u>Permissible Exposure Limit</u> |
|----------------------------|-------------|----------|------------------------------|-----------------------------------|
| Water | 7732-18-5 | 75-85 | NE | NE |
| C9-C11 ethoxylated alcohol | 61791-10-4 | 1-5 | NE | NE |
| Sodium hydroxide | 1310-73-2 | 1-2 | 2mg/m ³ | 2mg/m ³ |
| Tetrasodium EDTA | 64-02-8 | 1-5 | NE | NE |
| Sodium Silicate | 1344-09-8 | 1-5 | NE | NDA |

Balance of ingredients are not hazardous as defined by OSHA

Section 3 Physical Data

| | | | |
|-------------------------------|---------------|--------------------------|------------------|
| Form: | Liquid | pH as is: | 13.3 - 13.8 |
| Color: | Clear | pH (1% vol): | 10.7 -11.1 |
| Odor: | Slight | Solubility in Water: | Complete |
| Specific Gravity (Water = 1): | 1.040 - 1.043 | Vapor Density (Air = 1): | < 1 |
| Boiling Point °F: | approx. 212 | % VOC: | < 0.5 |
| Evaporation Rate (Water = 1): | <1 | Vapor pressure: | similar to water |

Section 4 Fire and Explosion Information

Flash Point (Method) F: greater than 200 Cleveland Open Cup

Unusual Fire and Explosion Hazards: Contact with metal can form hydrogen gas that is flammable and can form explosive mixtures with air. High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.

Extinguishing Agents: Foam, carbon dioxide, dry chemical, water fog, water

Fire fighting methods: Evacuate area and fight fire from a safe distance. If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop a leak. Use water spray to cool adjacent structures and to protect personnel. Shut off source of flow if possible. Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of storage tank due to fire. Fire fighters must wear MSHA/NIOSH approved positive pressure breathing apparatus with full face mask and full protective equipment.

Section 5 Health Hazard Data - Signs and Symptoms of Overexposure:

Probable Routes of Entry: Eyes, skin, inhalation

Eyes: Direct contact will cause severe irritation and burns if not properly treated. Effects may range from mild to irreversible damage and blindness depending upon length of exposure, solution concentration and first aid measures.

- Skin:** This product contains materials that can cause severe skin irritation. Prolonged or repeated contact may result in burns and irreversible damage. Prolonged exposure to diluted product can cause irritation.
- Inhalation:** Overexposure by inhalation of misted product may lead to irritation in respiratory tract, producing a burning, choking sensation. Caution should be taken to prevent atomizing or misting of this product without proper respiratory protection.
- Ingestion:** Ingestion is not expected to be a primary route of exposure. Do not ingest. Material will cause severe burns in mouth, throat and stomach. Note: Aspiration is a secondary hazard and should be expected. Product will attack lining of esophagus and stomach.

Medical conditions aggravated by exposure: Pre-existing skin disorders or abrasions.

Section 6 **Emergency First Aid Procedures**

- Eyes:** Check for and remove contact lenses. Flush immediately with copious amounts of water for 15 minutes while holding eyelids apart to ensure complete irrigation of eye and eyelid tissues. Take exposed individual immediately to a health care professional, preferably an ophthalmologist, for emergency first aid and further evaluation.
- Skin:** Remove contaminated clothing. Immediately wash exposed area with copious amounts of water. Repeat washing. If redness or irritation occurs, seek immediate medical attention. Launder contaminated clothing before reuse.
- Inhalation:** If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty breathing or is cyanotic, seek a health care professional immediately. Administer CPR if necessary.
- Ingestion:** Drink 1-2 large glasses of milk or water. Obtain immediate medical aid or call poison control. Do not induce vomiting unless directed by a physician. During vomiting there is a danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Gastric lavage should be performed only by qualified medical personnel. Keep affected person warm and at rest. Seek immediate medical attention or call 911.

Section 7 **Reactivity Data**

- Stability:** Stable at room temperature (68F) when stored and used under proper conditions.
- Incompatibility:** Avoid contact with acids and oxidizing materials. Contact with metals can form flammable hydrogen gas.
- Hazardous Decomposition Products:** Smoke, carbon dioxide, carbon monoxide, oxides of nitrogen and sulfur, reactive hydrocarbons and irritating vapors.
- Hazardous Polymerization:** Will not occur.

Section 8 **Spill & Leak Procedures**

- Procedures for Cleanup:** Wear protective gear. Small spills: Mop thoroughly and rinse with water.
- Large Spills:** Evacuate area. Eliminate ignition sources. Block potential routes to water systems (sewers, streams, etc.) with inert material such as sand or dirt. Salvage for reuse if possible. Place into disposal containers. Wash down affected areas with clear water. RCRA regulated. Call local Emergency Response agency to report spill.
- Waste Disposal:** Contact the proper county, state or federal authorities. RCRA regulated.

Section 9 **Special Protection Information**

- Ventilation Type Required:** Use general or local mechanical methods. If vapor or mist is generated provide ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure.
- Eye Protection:** Eye protection must be worn. Wear safety glasses with side shields or splash proof goggles.

| | |
|-------------------------|---|
| Protective Gloves: | Impervious gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption. |
| Respiratory Protection: | None required if airborne concentrations are maintained below threshold limits. Where misting and vapors may occur, wear an MSHA/NIOSH approved half mask form dust/mist air purifying respirator |
| Other Equipment: | Eyewash stations and showers should be available in areas where this material is used and stored. Recommended: Rubber apron and boots. |

Section 10 Special Precautions

Product should be stored between 40 and 95⁰F. Store out of direct sunlight. Keep out of reach of children. Keep container closed when not in use. For industrial and institutional use only. Mix only with water. Thoroughly rinse empty containers before disposal. Use only in well ventilated area. Do not breathe vapors. Wash hands thoroughly after handling.

Section 11 Toxicological Properties

Toxicity:

| <u>Ingredient</u> | <u>LD50 - Oral</u> | <u>LD50 – skin absorption</u> | <u>LC50 - Inhalation</u> | <u>Effects</u> |
|----------------------------|---------------------------|--------------------------------------|---------------------------------|-------------------------------|
| C9-C11 ethoxylated alcohol | 1.4 mg/kg (rat) | > 5000 mg/kg (rat) | | Not a sensitizer |
| Sodium hydroxide | ND | ND | ND | Corrosive |
| Tetrasodium EDTA | ND | ND | ND | Moderate irritant, eye & skin |
| Sodium Silicate | 1960 mg/kg (rat) | 4640 mg/kg (rabbit) | ND | ND |

Carcinogenicity:

| <u>Ingredient</u> | <u>NTP</u> | <u>IARC</u> | <u>OSHA</u> |
|----------------------------|-------------------|--------------------|--------------------|
| C9-C11 ethoxylated alcohol | No | No | No |
| Sodium hydroxide | No | No | No |
| Tetrasodium EDTA | No | No | No |
| Sodium Silicate | No | No | No |

Other effects:

| <u>Ingredient</u> | <u>Reproductive Toxicity</u> | <u>Teratogenicity</u> | <u>Mutagenicity</u> |
|----------------------------|-------------------------------------|------------------------------|----------------------------|
| C9-C11 ethoxylated alcohol | ND | ND | ND |
| Sodium hydroxide | ND | ND | ND |
| Tetrasodium EDTA | ND | ND | ND |
| Sodium Silicate | ND | ND | ND |

Section 12 Ecological Information

Ingredient

| | | |
|----------------------------|------------------------|--|
| C9-C11 ethoxylated alcohol | Readily biodegradable | |
| Sodium hydroxide | ND | |
| Tetrasodium EDTA | Environmental fate: ND | 96 Hr LC50 bluegill sunfish: 490 mg/L (Static) |
| Sodium Silicate | Environmental fate: ND | 96 Hr EC50 Daphnia magna: 216 mg/L |

Section 13 Hazard Rating - HMIS

0 = minimal 1 = minimal 2 = moderate 3 = serious 4 = severe
 Health: 2 Reactivity: 0 Fire: 0 Personal protection equipment = B (gloves & glasses)

Section 14 Regulatory**• Chemical Inventory Status - part 1 •**

| Ingredient | TSCA | EC | Japan | Australia |
|----------------------------|-------------|-----------|--------------|------------------|
| C9-C11 ethoxylated alcohol | Yes | Yes | Yes | Yes |
| Sodium hydroxide | Yes | Yes | Yes | Yes |
| Tetrasodium EDTA | Yes | Yes | Yes | Yes |
| Sodium Silicate | Yes | Yes | Yes | Yes |

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• Chemical Inventory Status – part 2 •

| Ingredient | Korea | -----Canada----- | | Philippines |
|----------------------------|--------------|-------------------------|-------------|--------------------|
| | | DSL | NDSL | |
| C9-C11 ethoxylated alcohol | Yes | Yes | No | Yes |
| Sodium hydroxide | Yes | Yes | No | Yes |
| Tetrasodium EDTA | Yes | Yes | No | Yes |
| Sodium Silicate | Yes | Yes | No | Yes |

• Federal, State & International Regulations – part 1 •

| Ingredient | ---- SARA 302 ---- | | ----- SARA 313 ----- | |
|----------------------------|---------------------------|------------|-----------------------------|-----------------------|
| | RQ | TPQ | List | Chemical Catg. |
| C9-C11 ethoxylated alcohol | No | No | No | No |
| Sodium hydroxide | No | No | No | No |
| Tetrasodium EDTA | No | No | No | No |
| Sodium Silicate | No | No | No | No |

• Federal, State & International Regulations – part 2 •

| Ingredient | CERCLA | RCRA 261.33 | TSCA 8(d) |
|----------------------------|---------------|--------------------|------------------|
| C9-C11 ethoxylated alcohol | No | No | No |
| Sodium hydroxide | 1000 | No | No |
| Tetrasodium EDTA | No | No | No |
| Sodium Silicate | No | No | No |

Chemical Weapons Convention: No **TSCA 12(b):** No **CDTA:** No

SARA 311/312: **Acute:** Yes **Chronic:** No **Fire:** No **Pressure:** No

Reactivity: No

Section 15 Shipping Name

Corrosive liquid, basic, inorganic, n.o.s. (sodium hydroxide), 8, UN3266, PGIII

Section 16 WHMIS

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Class **Description**
 E Corrosive material

Symbol

Section 17 Documentary Information

Date issued: 11-17-06 Supercedes: 01-06-06 Reason for update: Total update
Prepared by: S. VanGrasstek Title: Chem-Tech Lab Manager Phone: 763-417-1380

ABBREVIATIONS:

NE = NOT ESTABLISHED

NDA = NO DATA AVAILABLE

> = GREATER THAN

<= LESS THAN

BCF = BIOCONCENTRATION FACTOR

ND = NO DATA

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