

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION

OSTREM CHEMICAL CO. LTD.  
2310 - 80 AVENUE  
EDMONTON AB T6P 1N2

Phone: 780-440-1911 or 780-446-0177  
In Case of Emergency Only:  
phone CANUTEC at (613) 996-6666

**Product name:** DL-50 MACHINE DISHWASH  
**Other name:** CALWASH POWDER, CC-50xx  
**Distributed by:** CALTECH TECH SERVICES  
**Product use:** dishwash detergent  
**Date completed:** September 1, 2008

Code: J410

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
Sodium Carbonate	7-13	497-19-8
Sodium Metasilicate	15-40	6834-92-0

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### 3. HAZARDS IDENTIFICATION

Eye irritant. Dust inhalation may irritate nose, throat and lungs.

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### 4. FIRST AID MEASURES

**Inhalation:** Remove from exposure. Get fresh air.

**Ingestion:**

Induce vomiting only on the direct advice of a poison control centre. Get medical attention.

**Eye contact:** Flush with plenty of water for at least 15 minutes.

**Skin contact:** Remove contaminated clothing and flush with plenty of water.

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### 5. FIRE - FIGHTING MEASURES

**Flash point (test method):** Not applicable

**Flammable limits (%):** Non-flammable

**Lower:** Not applicable

**Upper:** Not applicable

**Fire extinguishing substances:** Use extinguishing media appropriate for surrounding fire.

**Autoignition temperatures:** Not applicable

**Hazardous combustion products:** May liberate carbon monoxide, carbon dioxide and oxides of sodium.

**Explosion data:**

**Sensitivity to mechanical impact:** Not applicable

**Sensitivity to static discharge:** Not applicable

**Special firefighting procedures:** As for surrounding fire.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear appropriate protective equipment.

**Environmental precautions:** Prevent from entering sewers, waterways or low areas.

**Methods for cleaning up:**

Isolate hazard area and restrict access. Small spills: soak up with inert absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

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### 7. HANDLING AND STORAGE

**Handling:** Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.  
**Storage:** Keep out of reach of children. Keep container tightly closed. Store in a cool, dry area.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls:** No special ventilation requirements.  
**Respiratory protection:** Not normally necessary. An N95 NIOSH respirator may be worn.  
**Eye protection:** Not normally necessary. Safety glasses may be worn.  
**Other protection:** Not normally necessary.

### Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
Sodium carbonate	Not available		
Sodium Metasilicate	Not available		

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid	<b>Solubility in water:</b>	10%
<b>Boiling point:</b>	Not applicable	<b>Vapour pressure:</b>	Not applicable
<b>Vapour density:</b>	Not applicable	<b>Evaporation rate:</b>	Not applicable
<b>Freezing point:</b>	Not applicable	<b>Odour threshold:</b>	Not available
<b>Sp. Gravity:</b>	Not applicable	<b>pH:</b>	1% sol. 11.4
<b>Appearance &amp; odour:</b>	White granular powder with chlorine odour		

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## 10. STABILITY AND REACTIVITY

**Stability:** Stable  
**Conditions of instability:** Not available  
**Incompatibility:** ( ) Water (X) Oxidizers (X) Acid ( ) Base ( ) Other  
**Conditions of reactivity:** Reacts with acids, aluminum, fluorine, lithium, strong mineral acids  
**Hazardous decomposition products:** Not available

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## 11. TOXICOLOGICAL PROPERTIES

### POTENTIAL ACUTE HEALTH EFFECTS

**Inhalation:** Breathing in the dust from this material may cause irritation and coughing.  
**Ingestion:** Swallowing small amounts of this material is not likely to cause harmful effects. Large amounts may cause stomach and intestinal irritation, abdominal pain and vomiting.  
**Eye contact:** May cause mild to severe irritation such as stinging, tearing, redness and swelling of the eyes.  
**Skin contact:** May cause skin irritation.  
**Skin absorption:** Not applicable

### POTENTIAL CHRONIC HEALTH EFFECTS:

**Inhalation:** Repeat or prolonged exposure may cause damage to lungs.  
**Ingestion:** Not available  
**Eye contact:** Not available  
**Skin contact:** Prolonged contact may cause discomfort.  
**Skin absorption:** Not applicable

<b>Irritancy of product:</b>	See WHMIS criteria
<b>Sensitization of product:</b>	Not available
<b>Carcinogenicity:</b> IARC (1, 2A or 2B)	No known significant effects.
ACGIH: (A1, A2 or A3)	No known significant effects.
<b>Reproductive toxicity:</b>	No known significant effects.

**Teratogenicity:** No known significant effects.  
**Mutagenicity:** No known significant effects.  
**Synergistic product:** Not available

HAZARDOUS INGREDIENTS	CAS NO.	TOXICITY DATA
Sodium carbonate	497-19-8	LD50 Oral (rat) 4090 mg/kg LC50 Inhalation (rat) 2300 mg/m3
Sodium Metasilicate	6834-92-0	LD50 Oral (rat) 847 mg/kg

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicological information:** Not available

**Other information:**

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## 13. DISPOSAL CONSIDERATIONS

**Waste disposal:** Disposal of all waste must be done according to local, provincial and federal regulations.

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## 14. TRANSPORT INFORMATION

**TDG classification:** Not regulated

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## 15. REGULATORY INFORMATION

**WHMIS:** D2B Other toxic effects

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

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## 16. PREPARATION INFORMATION

**Prepared by:** Technical Services Department, Ostrem Chemical Co. Ltd., Ph: (780) 440-1911