

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-50
Distributed by: Caltech Tech Services
Product use: dishwash detergent
Date completed: 13-Jul-2011

Code: J410

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
Sodium Carbonate	7-13	497-19-8
Sodium Metasilicate	15-40	6834-92-0
Sodium Dichloroisocyanurate Dihydrate	1-5	51580-86-0 (providing 1.4% total available chlorine)

3. HAZARDS IDENTIFICATION

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

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.

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.

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.

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.

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:

Lower:	ACGIH	OSHA	Other
Lower:	Not available		
Sodium Metasilicate	Not available		
Sodium Dichloroisocyanurate Dihydrate	Not available		

9. PHYSICAL AND CHEMICAL PROPERTIES

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

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

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

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

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

HAZARDOUS INGREDIENTS

Lower:	CAS NO.	TOXICITY DATA
	497-19-8	LD50 Oral (rat) 4090 mg/kg LC50 Inhalation (rat) 2300 mg/m ³
Sodium Metasilicate	6834-92-0	LD50 Oral (rat) 847 mg/kg
Sodium Dichloroisocyanurate Dihydrate	51580-86-0	LD50 Oral (rat) 735 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicological information: Not available
Other information:

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

TDG classification: Not regulated

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.

16. PREPARATION INFORMATION

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

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