SECTION 1 - IDENTIFICATION

Product identifier/Trade name:	V-100 DISH DETERGENT POWDER
Other means of identification:	V100
Recommended use	Automatic dishwasher detergent
Restriction on use:	For industrial, institutional and food plants use only.
Initial supplier identifier:	Chemotec (PM) Inc.
	8820 Place Ray-Lawson
	Anjou, Quebec, Canada H1J 1Z2
	Phone: (514) 729-6321; 1-800-729-6321
Emergency phone number:	(613) 996-6666 (CANUTEC)

SECTION 2 - HAZARDS IDENTIFICATION

2a WHMIS 2015 - GHS (Globally Harmonized System) classification

This product is classified as: Skin Corrosion (category 1B) Eye damage (category 1)

2b Label elements

Pictogram



Signal words Danger

Hazard statements

H314: Causes severe skin burns and eye damage

Precautionary statements

Do not breathe dusts or mists. Wash hands thoroughly after handling. Wear rubber gloves, protective clothing, eye or face protection.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately call a POISON CENTER or doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

IF ON SKIN or hair: Take off immediately all contaminated clothing. Rinse skin with water or shower.

Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

Storage: Store locked up.

Disposal: Dispose of contents and container in accordance with local, provincial and federal regulations.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients Sodium carbonate or soda ash	CAS # 497-19-8	% (weight) 10-30	GHS CLASSIFICATION Eye irritation, category 2
Sodium metasilicate	10213-79-3	10-18	Eye damage/Irritation Category 1 Skin Corrosion Category 1B; Corrosive to metals Category 1; Specific target organ toxicity (single exposure) Category 3.
Troclosene sodium, dihydrate	2893-78-9	0-1	Acute oral category 4; Eye irritation category 2; Specific target organ toxicity (single exposure) Category 3.

The actual concentrations are withheld as a trade secret.

SECTION 4 - FIRST AID MEASURES

4a Description of first aid measures

Eye contact:

Immediately rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice.

Skin contact:

Wash with plenty of water for several minutes. Remove contaminated clothing and wash before reusing. In case of skin irritation, get medical advice..

Inhalation:

Remove person to fresh air and keep comfortable for breathing. Get medical attention if irritation persists.

Ingestion:

Rinse mouth. Call a doctor if you feel unwell. Never give anything by mouth if the person is unconscious

4b Most important symptoms and effects

The most important known symptoms and effects are described in the labelling (section 2b) and/or in section 11.

4c Immediate medical attention and special treatment needed

No data available.

SECTION 5 - FIRE FIGHTING MEASURES

5a Extinguishing media

Suitable extinguishing media: Water (if possible avoid powerful sprays), foam, dry chemicals, carbon dioxide. Product itself is not flammable. Unsuitable extinguishing media: None known.

Specific hazards for product

Hazardous combustion products: Chlorine gas, oxides of carbon, sulfur and other irritating gases.

Special protective equipment and precautions for firefighters

Special fire-fighting procedures/equipment:

During a fire, chlorine a toxic gas and irritating smoke and fumes may be generated. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from products produced during the combustion. Move containers from fire area if it can be done without risk. A stream of water directed into the product generates a lot of foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6a Personal precautions, protective equipment and emergency procedures

Personal protection:

Avoid contact with eyes and skin. Use adequate aeration and ventilation. Floor will be slippery in case of a spill. Use appropriate personal protection equipment (see section 8)

6b Methods and materials for containment and cleaning:

Stop the leak. For large spills, pump the product into drums or clean up spills using absorbent material. Resume cleaning by rinsing with water. Caution: floors will be slippery.

6c Environmental precautions:

Product is not biodegradable and is corrosive. Do not let go to the sewers.

SECTION 7 - HANDLING AND STORAGE

7a Precautions for Safe handling:

Avoid contact with eyes and skin. When used as directed, direct contact is not very likely.

7b Condition for safe storage:

Store in a sealed container in a well-ventilated place. Do not store with food products.

7c Special packaging materials: Store in its original container made of polyethylene. This product when wet may become corrosive to certain metals.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

8a Control parameters

	Ontario Time-weighted Average Limit (TWA)	Ontario Short-Term Exposure Limit (STEL)	Notations
Sodium metasilicate	None established	None established	
Sodium carbonate	None established	None established	
Troclosene sodium, dihydrate	None established	None established	

8b Engineering controls:

Provide adequate ventilation.

8c Individual protection measures

Respiratory Protection:

Not required under normal applications.

Respirator NIOSH/MSHA approved if large spill and lack of ventilation or if formation of mists. Skin protection and other protective equipment:

Waterproof boots in case of spills. Plastic or rubber gloves recommended.

Eye / face protection:

Safety goggles recommended.

General hygiene considerations:

KEEP OUT OF REACH OF CHILDREN. Avoid contact with eyes and skin. Never eat, drink, or smoke in work areas. Good hygiene is recommended after use of this product.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor:	White powder with light chlorine odor
Odour threshold:	N/Av
pH :	Approximately 12 (1% solution)
Melting point and freezing point:	Not applicable
Boiling point:	Not applicable
Flash point:	Not applicable
Evaporation rate (n-BuAc =1):	Not applicable
Lower flammable limit (% by volume):	N/Av
Upper flammable limit (% by volume):	N/Av.
Explosion data - Sensitivity to mechanical impact:	Not sensitive
Explosion data - Sensitivity to static discharge:	Not sensitive
Vapour pressure (mm Hg)	Not applicable
Vapour density:	Not applicable
Specific gravity or density (water = 1 at 4 °C):	Not applicable
Solubility in water:	Very soluble
Partition coefficient – n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature	Not available
Viscosity:	Not applicable

SECTION 10 - STABILITY AND REACTIVITY

10a Reactivity:

Not applicable when used as directed. It is incompatible with some materials, see below.

10b Chemical stability :

Stable at room temperature, in normal handling and storage conditions.

10c Possibility of hazardous reactions:

May react with strong acids, strong oxidizing agents and aluminium and other soft metals like zinc.

10d Conditions to avoid:

Avoid contact with strong acids, strong oxidizers and soft metals like aluminium, zinc, etc.

10e Incompatible materials

Strong acids, strong oxidizers, soft metals

10f Hazardous decomposition products:

With strong acids or oxidizers: heat, water vapors and irritant chlorine gas. With soft metals like aluminium, flammable and explosive hydrogen gas.

SECTION 11 - TOXICOLOGICAL INFORMATION

Primary entry route(s):Eye and ingestion.Eye:Corrosive product. May cause burns, irritation, redness, tears, burning sensation.Skin:May cause sever irritation and burns on skin, necrosis of cutaneous tissues.

Inhalation: Breathing high concentrations of dusts or mists may cause headache, nausea, vomiting, dizziness. *Ingestion:* Causes burns to mouth, throat, oesophagus, stomach.

Carcinogenicity:	No ingredient listed by IARC as a possible
	carcinogen.
Teratogenicity, mutagenicity, other reproductive effects:	Genetic toxicity tests have been negative for
	ingredients
Skin sensitization:	Ingredients not sensitizing
Respiratory tract sensitization:	Not available
Synergistic materials:	Not available
Other important hazards:	Not available

Toxicological data: The calculated LD₅₀ for this product is greater than 4,000 mg/Kg, oral, rat; our products are not tested on animals.

LD ₅₀ (route, species)	LC ₅₀ # hours (species)
4,090 mg/kg (oral, rat) 2,210 mg/kg (dermal, rabbit)	Not available
1,153 mg/kg (oral, rat)	Not available
1671 mg/kg (oral, rat)	Not available
	4,090 mg/kg (oral, rat) 2,210 mg/kg (dermal, rabbit) 1,153 mg/kg (oral, rat)

For more details, refer to Section 3.

SECTION 12 - ECOLOGICAL INFORMATION

12a Ecotoxicity :

TOXICITY (Fish)	Results	Exposure time	Method
Sodium carbonate	Trout and salmon: 68-80 mg/L	96H	Not available
Troclosene sodium, dihydrate	Rainbow trout >2100 mg/L	96H	Not available
Sodium metasilicate	Leuciscus idus >146 mg/L	48H	Not available

TOXICITY (Daphnia)	Results	Exposure time	Method
Sodium carbonate	>146mg/L	24H	Not available
Troclosene sodium, dihydrate	EC50 > 230 mg/L	48H	Not available
Sodium metasilicate	LC50 3,8-6,2 mg/L EC50 >146 mg/L	24H	Not available

TOXICITY (Algea)	Results	Exposure time	Method
Sodium carbonate	Selenastrum EC50 230 mg/L	96H	Not available
Troclosene sodium, dihydrate	Navicula pelliculosa EC50 > 5000 mg/L	96H	Not available

Sodium metasilicate	Desmodesmus subspicatus 207 mg/L		72H	Not available
12b Persistence and degr	adability:	Product is not r	eadily biodegradable.	
12c Bioaccumulation potential: Not expect		Not expected to	be bioaccumulative.	
12d Mobility in soil:	There is no test data on this product.			
12e Other adverse effectNo applicable		No applicable i	nformation found	

SECTION 13 - DISPOSAL CONSIDERATIONS

Eliminate according to federal, provincial and local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Transportation of Dangerous Goods: Not regulated UN number Proper shipping name: Class: Packing group: Special case:

SECTION 15 - REGULATORY INFORMATION

In Canada

WHMIS information:

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and this safety data sheet (SDS) contain all the information required by the HPR.

WHMIS 2015 Classification:	See section 2a
CEPA information:	Ingredients are listed on the DSL inventory.

SECTION 16 - OTHER INFORMATION

Date of latest revision 2016-05-03

References:

- 1. Manufacturer'/suppliers' MSDS.
- 2. Occupational Exposure Limits for Ontario Workplaces required under Regulation 833
- 3. International Agency for Research on Cancer Monographs
- 4. The European Chemicals Agency (ECHA) website.

Abbreviations:

ACGIH

American Conference of Governmental Industrial Hygienists

CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act
cps	Centipoises
DSL	Domestic Substance List
HMIS	Hazardous Material Information System
IARC	International Agency for Research on Cancer
LC	Lethal concentration
LD	Lethal Dosage
N/Av	Not available
N/Ap	Not Applicable
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value
WHMIS	Workplace Hazardous Materials Information System

End of the MSDS