

**SECTION 1 - IDENTIFICATION**

**Product identifier/Trade name:** V-300 HARD WATER DISH DETERGENT

**Other means of identification:** V300

**Recommended use:** Hard water dish detergent for industrial automatic dishwashers

**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 GHS (Globally Harmonized System) classification****This product is classified as:**

Skin Corrosion/Irritation — category 1  
Serious eye damage/eye irritation — category 1  
Corrosive to metals — category 1

**2b Label elements****Pictogram**

**Signal word** Danger

**Hazard statements**

**May be corrosive to metals**

**Causes severe skin burns and eye damage**

**Precautionary statements**

**Do not breathe 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.

Absorb spillage to prevent material-damage.

**Storage:** Store locked up. Keep only in original packaging.

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

### SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (weight)	GHS CLASSIFICATION
Sodium hydroxide	1310-73-2	7-13	Skin Corrosion/Irritation Category, 1A; Eye damage/Irritation Category, 1 Corrosive to metals Category, 1.
Disodium trioxosilicate or disodium oxosilanediolate	6834-92-0	1-5	Skin Corrosion/Irritation Category, 1B; Eye damage/Irritation, Category 1 Specific target organ toxicity (single exposure), Category 3. Corrosive to metals, Category 1.
Tetrasodium ethylenediaminetetraacetate	64-02-8	15-40	Acute Toxicity, oral, Category 4 Acute Toxicity, by inhalation, Category 4 Eye damage/Irritation Category, 1

The actual concentrations are withheld as a trade secret.

### SECTION 4 - FIRST AID MEASURES

#### 4a Description of first aid measures

##### Eye contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if present and easy to do. Continue to rinse for at least 20 minutes. If irritation persists, continue rinsing. Chemical burns must be treated promptly by a physician. Immediately call a POISON CENTER or doctor.

##### Skin contact:

Rinse immediately contaminated skin for at least 20 minutes or more if necessary. While rinsing, remove all contaminated clothing, jewelry and shoes. Immediately call a POISON CENTER or doctor. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

##### Inhalation:

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

##### Ingestion:

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, get him to drink plenty of water to dilute product. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs spontaneously, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### 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:

Oxides of carbon, nitrogen and other irritating gases.

#### Special protective equipment and precautions for firefighters

Special fire-fighting procedures/equipment:

During a fire, irritating smoke and fumes may be generated. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from irritating products produced during the combustion. Move containers from fire area if it can be done without risk.

### 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 readily biodegradable. Do not let go to the sewers.

### SECTION 7 - HANDLING AND STORAGE

#### 7a Precautions for Safe handling:

Avoid contact with eyes and skin. Wear rubber gloves, protective clothing and eye or face protection. Always add product to water. Use cold water to prevent excessive heat generation.

#### 7b Condition for safe storage:

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

**7c Special packaging materials:** Store in its original container made of polyethylene. Material may be corrosive to

certain metals like aluminium among others.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

### 8a Control parameters

	Ontario Time-weighted Average Limit (TWA)	Ontario Short-Term Exposure Limit (STEL)	Notations
Sodium hydroxide	C 2 mg/m <sup>3</sup>	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:

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

Eye / face protection:

Eye protection or face protection.

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

<b>Appearance and odor:</b>	Colorless liquid, low odor
<b>Odour threshold:</b>	N/Av
<b>pH :</b>	13-14
<b>Melting point and freezing point:</b>	Approximately 0 °C
<b>Boiling point:</b>	Approximately 100 °C
<b>Flash point:</b>	None to boil
<b>Evaporation rate (n-BuAc =1):</b>	Approximately 0.4 (water)
<b>Lower flammable limit (% by volume):</b>	N/Av
<b>Upper flammable limit (% by volume):</b>	N/Av.
<b>Explosion data - Sensitivity to mechanical impact:</b>	Not sensitive
<b>Explosion data - Sensitivity to static discharge:</b>	Not sensitive
<b>Vapour pressure (mm Hg)</b>	Approximately 20 (water)
<b>Vapour density:</b>	Approximately 0.6 (water)
<b>Specific gravity or density (water = 1 at 4 °C):</b>	1.2 g/cm <sup>3</sup> @ 20 °C
<b>Solubility in water:</b>	Miscible
<b>Partition coefficient – n-octanol/water:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Viscosity:</b>	<100 cps @ 77°F (25 °C)

## 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. When dissolving in water, heat is generated which could lead to spurting of the corrosive product if agitation is insufficient.

**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. With hypochlorites, toxic and irritant chlorine gas. With soft metals like aluminium, flammable and explosive hydrogen gas.

<b>SECTION 11 - TOXICOLOGICAL INFORMATION</b>
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**Primary entry route(s):** Eye and ingestion.

**Eye:** Extremely corrosive product. May cause burns, irritation, redness, tears, burning sensation.

**Skin:** May cause severe irritation and burns on skin, necrosis of cutaneous tissues.

**Inhalation:** Corrosive product. Breathing high concentrations may cause headache, nausea, vomiting, dizziness and burns of respiratory tract.

**Ingestion:** Corrosive product. Violent pain in throat, mouth, gut, oesophagus and/or stomach perforation, collapse, possible death.

**Carcinogenicity:**

No ingredient listed by IARC as a possible carcinogen.

**Teratogenicity, mutagenicity, other reproductive effects:** No applicable information found.

**Skin sensitization:** Ingredients not sensitizing

**Respiratory tract sensitization:** Not available

**Synergistic materials:** Not available

**Other important hazards:** Not available

**Toxicological data:** The calculated LD<sub>50</sub> for this product is greater than 2,500 mg/Kg, oral, rat; our products are not tested on animals. However for corrosive materials, the estimated toxicity is not relevant.

Ingredient	LD <sub>50</sub> (route, species)	LC <sub>50</sub> # hours (species)
Sodium hydroxide	325 mg/kg (oral, rat)	Not available
Disodium Trioxosilicate or disodium oxosilanediolate	847 mg/kg (oral, rat)	Not available
Tetrasodium ethylenediaminetetraacetate	1780-2000 mg/kg (oral, rat) >5000 mg/kg (dermal, rabbit)	Not available

For more details, refer to Section 3.

<b>SECTION 12 - ECOLOGICAL INFORMATION</b>
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**12a Ecotoxicity :**

TOXICITY (Fish)	Results	Exposure time	Method
Sodium hydroxide	Gambusia affinis 125 mg/L	96H	Not available

Disodium Trioxosilicate or disodium oxosilanediolate	Leucisus idus >146 mg/L	96H	Not available
Tetrasodium ethylenediaminetetraacetate	Lepomis macrochirus 1592 mg/L	96H	Not available

TOXICITY (Daphnia)	Results	Exposure time	Method
Sodium hydroxide	40.4 mg/L	48H	Not available
Disodium Trioxosilicate or disodium oxosilanediolate	EC50 >146 mg/L	24H	Not available
Tetrasodium ethylenediaminetetraacetate	140 mg/L	48H	Not available

TOXICITY (Algae)	Results	Exposure time	Method
Sodium hydroxide	Not available		
Disodium Trioxosilicate or disodium oxosilanediolate	Desmodesmus subspicatus 207 mg/L	72H	Not available
Tetrasodium ethylenediaminetetraacetate	Pseudokirchneriella subcapitata: >100 mg/l	72H	Not available

**12b Persistence and degradability:** Product is not readily biodegradable.

**12c Bioaccumulation potential:** Not available

**12d Mobility in soil:** There is no test data on this product.

**12e Other adverse effect** No applicable information found

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Eliminate according to federal, provincial and local regulations.

**SECTION 14 - TRANSPORTATION INFORMATION**

**Transportation of Dangerous Goods:**

UN number	UN3266
Proper shipping name:	Corrosive liquid basic, inorganic, N.O.S. (Sodium hydroxide)
Class:	8
Packing group:	II
Special case:	

<b>SECTION 15 - REGULATORY INFORMATION</b>
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**In Canada****WHMIS information:**

Product is regulated according to the *Hazardous Products Regulations* (HPR) in Canada. This product has been classified in accordance with the hazard criteria of the HPR and this MSDS contains all the information required by the HPR.

**WHMIS Classification:** See section 2a.

**CEPA information:** Ingredients are listed on the DSL inventory.

<b>SECTION 16 - OTHER INFORMATION</b>
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**Date of latest revision:** 2017-11-23

**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