



MATERIAL SAFETY DATA SHEET

DETERGENT FOR DISWASHER PELLETS

Effective date:31-Jan-2015

SECTION 1 : IDENTIFICATION	
Product name:	DETERGENT FOR DISWASHER PELLETS
Chemical name :	Mixture of tensio-active agents
Product Use:	Pellets of detersif for dishwasher
Chemical family :	Mixture of tensio-active agents
Supplier's name:	LAVO Inc
Address :	11900 Boul. Saint-Jean Baptiste Montréal, Québec Canada H1C 2J3
Telephone :	1-800-361-6898 or 514-526-7783
Emergency phone :	CANUTEC (transport) 1-613-996-6666

SECTION 2 : HAZARD IDENTIFICATION	
Emergency Overview	WARNING MAY CAUSE EYES IRRITATION. MAY CAUSE SKIN IRRITATION.
POTENTIAL HEALTH EFFECTS:	
Signs and symptoms of short-term (acute) exposure	
Eyes :	May cause irritation.
Skin :	May cause irritation.
Ingestion :	May cause stomach distress, nausea or vomiting.
Inhalation :	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.
Target organs:	Eyes. Skin.
Effects of long-term (chronic) exposure :	Prolonged or repeated contact may cause drying, cracking and de-fatting of the skin.
Signs and symptoms:	Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Potential environmental effect :	Components of this product have been identified as having potential environmental concerns.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredients	CAS	Conc
Substilisine Carlsburg	9014-01-1	0.1 - 1%w/w
Sodium disilicate	13870-28-5	5 – 10 %w/w
Sodium percarbonate	15630-89-4	10 – 30 %pw/w
Sodium Citrate	6132-04-3	10 – 30 %w/w
Sodium carbonate	497-19-8	15 – 40 %w/w



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SECTION 4 : FIRST AID MEASURES	
Eye contact :	Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.
Skin contact:	Flush with cool water. Obtain medical attention if irritation persists.
Ingestion :	Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
Inhalation :	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Notes for physician :	Treat symptomatically.
General advice :	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

SECTION 5 : FIRE FIGHTING MEASURES	
Fire hazards/conditions of flammability:	Not flammable by WHMIS criteria
Extinguishing media:	Treat for surrounding material.
Protection of firefighters	
Specific hazards arising from the chemical:	Not available.
Protective equipment for firefighters:	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products :	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulphur. Oxides of sodium.
Explosion data	Not available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES	
Personal precautions:	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak..
Environmental precautions:	Do not discharge into lakes, streams, ponds or public waters.
Methods for containment:	Stop leak if you can do so without risk. Prevent entry into waterways, Sewers, basements or confined areas.
Methods for cleaning up :	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

SECTION 7 : HANDLING AND STORAGE	
Safe Handling procedures:	Use good industrial hygiene practices in handling this material. Avoid contact with eyes and skin. Do not breathe dust from this material. Wash thoroughly after handling.
Storage requirements :	Keep out of reach of children. Store in a closed container away from incompatible materials.
Storage temperature:	5-30 C. Do not freeze. Avoid high temperature.



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SECTION 8 : EXPOSITION CONTROL/PERSONAL PROTECTION		
Exposition limit values	ACGIH TLV	
Ingredients	CAS	TWA
Substilisine Carlsburg	9014-01-1	ceiling: 0.0001 mg/m3
Sodium disilicate	13870-28-5	Not available
Sodium percarbonate	15630-89-4	Not available
Sodium Citrate	6132-04-3	Not available
Sodium carbonate	497-19-8	Not available
Engineering controls:	Not normally required.	
Eye/Face protection:	Safety glasses or a facial screen if eye contact is possible.	
Skin and body protection:	If there is constant skin contact, rubber gloves are recommended. Confirm with a reputable supplier first.	
Respiratory protection:	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.	
General hygiene considerations:	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.	

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES			
Physical state	Solid	Appearance	Octogonal Pellets
Odour	Fragrant various	Odor threshold	Not available
pH	>10	Water Solubility	Soluble
Boiling point	Not available	Evaporation Rate	Not available
Freezing point	Not available	Viscosity	Not available
Vapour Pressure mmHg @ 20°C/68°F)	Not available	Auto-ignition temperature	Not available
Flash point / Poor point	Not available	Flammability limits in air, lower %vol	Not available
Density	Not available	Flammability limits in air, upper %vol	Not available
Repartition Coefficient water/oil	Not available	Vapour density	Not available

SECTION 10 : STABILITY AND REACTIVITY	
Reactivity:	This product may react with strong acids.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Chemical stability:	Stable under recommended storage conditions.
Conditions to avoid:	Do not mix with other chemicals.
Incompatible materials:	Acids. Oxidizers. Caustics.
Hazardous decomposition products:	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulphur. Oxides of sodium.



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SECTION 11 : TOXICOLOGICAL INFORMATION		
<u>Ingredients</u>	CAS	LC50(4hr)inh, rat
Substilisine Carlsburg	9014-01-1	Not available
Sodium disilicate	13870-28-5	Not available
Sodium percarbonate	15630-89-4	Not available
Sodium Citrate	6132-04-3	Not available
Sodium carbonate	497-19-8	400 mg/kg guinea pig
<u>Ingredients</u>	CAS	LD50 (Oral, rat)
Substilisine Carlsburg	9014-01-1	Not available
Sodium disilicate	13870-28-5	Not available
Sodium percarbonate	15630-89-4	2200 mg/kg mouse : 1034 mg/kg rat
Sodium Citrate	6132-04-3	Not available
Sodium carbonate	497-19-8	4090 mg/kg mouse
Effects of acute exposure:		
Eye :	May cause irritation.	
Skin :	May cause irritation.	
Inhalation:	Dusts of this product may cause irritation of the nose, throat, and respiratory tract.	
Ingestion :	May cause stomach distress, nausea or vomiting.	
Sensitization to material :	Contains a potential respiratory tract sensitizer.	
Chronic effects:	Non-hazardous by WHMIS criteria.	
Carcinogenicity :	Non-hazardous by WHMIS criteria.	
Reproductive effects:	Non-hazardous by WHMIS criteria.	
Teratogenicity :	Non-hazardous by WHMIS criteria.	
Mutagenicity:	Non-hazardous by WHMIS criteria.	
Synergistic Products :	Not available.	

SECTION 12 : ECOLOGICAL INFORMATION		
Eco toxicity :	CAS	Ecotoxicity - Freshwater Algae - Acute Toxicity Data
Sodium percarbonate	15630-89-4	240 Hr EC50 Chlorella emersonii: 70 mg/L
Sodium carbonate	497-19-8	120 Hr EC50 Nitzschia: 242 mg/L
Eco toxicity :	CAS	Ecotoxicity - Freshwater Fish - Acute Toxicity Data
Sodium percarbonate	15630-89-4	96 Hr LC50 Brachydanio rerio: 210 mg/L
Sodium carbonate	497-19-8	96 Hr LC50 Pimephales promelas: 70.7 mg/L [static]
Sodium carbonate	497-19-8	96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]; 96 Hr LC50 Pimephales promelas: 310 - 1220 mg/L [static]



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SECTION 12 : ECOLOGICAL INFORMATION (CONT'D)		
Eco toxicity :	CAS	Ecotoxicity - Water Flea - Acute Toxicity Data
Sodium percarbonate	15630-89-4	24 Hr EC50 Daphnia magna: 1000 mg/L
Sodium carbonate	497-19-8	48 Hr EC50 Daphnia pulex: 4.9 mg/L
Sodium carbonate	497-19-8	48 Hr EC50 Daphnia magna: 265 mg/L
Persistence and degradability:	Not available.	
Bioaccumulation Potential:	Not available.	
Mobility in environmental media :	Not available.	
Environmental effects:	Not available.	
Aquatic toxicity:	Not available.	
Partition coefficient	Not available.	
Chemical fate information :	Not available.	
Other adverse effects ;	Not available.	

SECTION 13 : DISPOSAL CONSIDERATIONS	
Disposal instructions:	Dispose in accordance with all applicable federal, state, provincial and local regulations.
Waste from residues / Unused products:	Not available.
Contaminated packaging	Not available.

SECTION 14 : TRANSPORT INFORMATION
Transportation of Dangerous Goods (TDG - Canada) : Not regulated as dangerous goods.

SECTION 15 : REGULATORY INFORMATION			
Canadian federal regulations :		This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.	
Canada - WHMIS - Ingredient Disclosure List			WHMIS labeling: 
Sodium carbonate	497-19-8	1%	
WHMIS classification :		Class D 2A 2B	
WHMIS status:		Controlled	
Inventory Status			
Country(s) or region		Inventory Name	On Inventory (Yes/No)*
Canada		Domestic Substances List (DSL)	Yes
Canada		Non-Domestic Substances List (NDSL)	No
* A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)			



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SECTION 16 : OTHER INFORMATION	
HMIS Rating; Chronic hazard: 0- Minimal 1-Slight 2-Moderate 3-Serious	
Health : 2 Flammability : 0 Reactivity : 0	
Disclaimer of liability:	The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. Lavo Inc. expressly disclaims all expressed or implied warranties for the accuracy or completeness of the data contained herein and assumes no responsibilities for any involved damages by above data. Product's users have to do their own tests to establish the applicability of the information for a specific use of the product. MSDS data does not apply to use with any other product or in any other process.
Other information :	For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document. References: MSDS of suppliers SIMDUT regulation
Prepared by :	Lavo Inc. 11900 Boul. Saint-Jean Baptiste Montreal, QC, Canada H1C 2J3 Téléphone : 1- 800-361-6898 www.lavo.ca
Issuing date :	31-Jan-2015
Due date :	31-Jan-2018