SAFETY DATA SHEET Herd Navigator Detergent

Preparation Date: 13-Jan-2017 **Next revision date:** 13-Jan-2022

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name	Herd Navigator Detergent
Item#:	NZ0007
Recommended use	Cleansing agents, alkaline
Uses advised against	Restricted to professional users
Supplier	DeLaval Manufacturing PO Box 15-205 Kells Place Hamilton New Zealand
Telephone Number	+64 7 847 9904 (8am - 4:30pm Mon-Fri)
Emergency Telephone Number	111 - Fire Brigade (for hazardous spills and fires) +64 3 474 7000 - National Poisons Centre (for medical emergencies)

2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture according to GHS

Acute toxicity - Oral - Category 4
Skin corrosion/irritation - Category 1
Serious eye damage/eye irritation - Category 1
Corrosive to Metals - Category 1

HSNO Classifications	6.1D Substances that are acutely toxic 8.2C Substances that are corrosive to dermal tissue 8.3A Substances that are corrosive to the eye 8.1A Substances that are corrosive to metals

2.2. Label Elements

Hazard Pictogram(s)

Signal word DANGER

Hazard Statements
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H290 - May be corrosive to metals

Precautionary statements
P102 - Keep out of reach of children
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P501 - Dispose of contents/container in accordance with local regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Potassium hydroxide	1310-58-3	10 - 30%
Sodium hydroxide	1310-73-2	10 - 30%
Tetrasodium EDTA	64-02-8	1 - 10%

Other ingredients, determined not to be hazardous subject to the provisions of the Hazardous Substances (identification) Regulations 2001, make up the product concentration to 100%

4. FIRST AID MEASURES

Workplace Facilities Eyewash bottle with clean water

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye contact Immediate medical attention is required
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Keep eye wide open while rinsing

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move to fresh air
If not breathing, give artificial respiration
If breathing is difficult, give oxygen
Call a physician or Poison Control Centre immediately

Ingestion Immediate medical attention is required. Remove from exposure, lie down. Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Centre immediately.

Notes to Physician Treat symptomatically.

Protection of First-aiders Use personal protective equipment. Avoid contact with skin, eyes and clothing.
Antidote For more information, contact the National Poisons and Hazardous Chemicals Information Centre:
University of Otago - Dunedin, NZ
+64 3 479 7248
www.toxinz.com

5. FIRE-FIGHTING MEASURES

Hazchem Code No information available

Flammable Properties No information available.

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. alcohol-resistant foam.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical Thermal decomposition can lead to release of irritating gases and vapours. In the event of fire and/or explosion do not breathe fumes.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods for cleaning up Dam up. Take up mechanically and collect in suitable container for disposal. After cleaning, flush away traces with water.

Hazardous Substances (Emergency Management) Regulations 2001 No information available

7. HANDLING AND STORAGE

Handling Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep away from direct sunlight. Keep away from metals. Corrosive to metals.

Type of Container/Package Store in original container

Handle and store according to AS/NZS Standards and the Responsible Care Management Systems: Managers Handbook.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	OSH (New Zealand, 1/2002)
Potassium hydroxide	Ceiling: 2 mg/m^3
Sodium hydroxide	Ceiling: 2 mg/m^3

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Tightly fitting safety goggles. Face-shield.

Skin Protection Long sleeved clothing, Chemical resistant apron, Boots

Hand Protection Neoprene gloves

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In case of insufficient ventilation wear suitable

respiratory equipment.

General Hygiene Considerations
Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light yellow
Physical state	Liquid
Odor	Pungent
pH	(1 %) 12.5
Vapor Pressure	No data available
Vapor Density	No data available
Flash Point	No data available
Autoignition Temperature	No data available
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Boiling Point/Range	No data available
Freezing Point/Range	No data available
Solubility	No information available
Solubility in other solvents	No data available
Specific Gravity	No data available
Density	1.360 g/mL

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Burning produces obnoxious and toxic fumes. Heating can release hazardous gases. To avoid thermal decomposition, do not overheat.
Incompatible Materials	Incompatible with strong acids and bases, Incompatible with oxidizing agents
Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Inhalation No information available.
Eye contact Corrosive.
Skin contact Corrosive.
Ingestion Ingestion causes burns of the upper digestive and respiratory tracts. Can burn mouth, throat, and stomach. Harmful if swallowed.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	= 284 mg/kg (Rat)		
Sodium hydroxide	2000 mg/Kg	1350 mg/kg	
Tetrasodium EDTA	= 1658 mg/kg (Rat) = 10 g/kg (Rat)		

Irritation No information available
Corrosivity Corrosive.
Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity There are no known carcinogenic chemicals in this product.
Reproductive Effects No information available.
Developmental Effects No information available.
STOT - single exposure No information available
STOT - repeated exposure No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Microtox	Waterflea
Potassium hydroxide		80: 96 h Gambusia affinis mg/L LC50 static		
Sodium hydroxide		LC50 (96 h) 72 mg/L		
Tetrasodium EDTA	1.01: 72 h Desmodesmus subspicatus mg/L EC50	41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static		610: 24 h Daphnia magna mg/L EC50

Persistence and degradability No information available

Bioaccumulation/Accumulation No information available.

Mobility No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Should not be released into the environment. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

UN-No	1719
Proper Shipping Name	1719 - Caustic alkali liquid, n.o.s (Sodium hydroxide, Potassium hydroxide)
Packing Group	III
Special Provisions	None
Hazchem Code	No information available

15. REGULATORY INFORMATION

ERMA NZ Registration Number	Not Available
ERMA Group Standard	No information available
HSNO Classifications	6.1D Substances that are acutely toxic 8.2C Substances that are corrosive to dermal tissue 8.3A Substances that are corrosive to the eye 8.1A Substances that are corrosive to metals
ERMA Reference	ERMA User Guide to the HSNO Controls, which links to the Hazardous Substances Regulations 2001

16. OTHER INFORMATION

Prepared By	DeLaval NV Industriepark-Drongen 10 9031 Gent Belgium
Preparation Date:	13-Jan-2017
Reason for revision	Update Section: 2
References	NZS 5433:2007 Transport of Dangerous Goods on Land Land Transport (Dangerous Goods) Rule 45001:2005 Hazardous Substances Regulations 2001: - Minimum Degrees of Hazard - Classification - Classes 1 to 5 Controls - Classes 6, 8 and 9 Controls - Packaging Regulations - Identification Regulations - Dispoal Regulations - Emergency Management - Identification Regulations - Disposal Regulations Health and Safety in Employment Regulations 1995 User Guide to the HSNO Thresholds and Classifications OSH Workplace Exposure Standards January 2002 NZCIC Approved Code of Practice - Preparation of Safety Data Sheets Signage for premises storing hazardous substances and dangerous goods

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of SDS