Della-Star

SAFETY DATA SHEET

Preparation Date: 13-Mar-2017 **Revision Date:** 08-Jun-2018 **Revision Number:** 3

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

Product Identifier

Product Name Della-Star

Other means of identification

Item#: CAN6550

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Cleaning agent

Uses advised against All other

Details of the supplier of the safety data sheet

Supplier DeLaval Inc.
10900 Rue Secant Street
Ville d'Anjou, Quebec H1J 1S5
Tel: (705) 741-3100

Emergency Telephone Number

(613) 996-6666 (Canutec)

2. HAZARDS IDENTIFICATION

Classification

Acute Toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Corrosive to metals	Category 1

Label Elements

DANGER

Hazard statements

Harmful if swallowed
Causes severe skin burns and eye damage

May be corrosive to metals

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not

breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response
Specific treatment (see First Aid on this label)
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. Corrosive to the eyes and may cause severe damage including blindness. Immediately call a POISON CENTER or doctor.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Extremely corrosive and destructive to tissue.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Inhalation of vapours in high concentration may cause irritation of respiratory system.
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do not induce vomiting. Ingestion causes burns of the upper digestive and respiratory tracts.

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No	Weight %
Potassium hydroxide	1310-58-3	10 - 30*
Sodium hypochlorite	7681-52-9	1 - 5*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first-aid measures

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Skin contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation Move to fresh air. Get medical attention immediately if symptoms occur. If breathing is difficult, give oxygen. If symptoms persist, call a physician.

Ingestion Do not induce vomiting. Drink 1 or 2 glasses of water. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention immediately. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Corrosive. The product causes burns of eyes, skin and mucous membranes.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available

Specific hazards arising from the chemical
Corrosive to metals. The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products
Thermal decomposition can lead to release of irritating gases and vapours.

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.

NFPA **Health hazards** 3 **Flammability** 0 **Instability** 1

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid contact with skin, eyes and clothing. For personal protection see section 8.

Environmental Precautions
Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

Incompatible Materials Acids, light metals (e.g. aluminum, copper, brass, zinc galvanized).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	Alberta	British Columbia	Ontario TWAEV	Quebec
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m^3	Ceiling: 2 mg/m^3	CEV: 2 mg/m^3	Ceiling: 2 mg/m^3

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Goggles

Skin and body protection Rubber gloves, Long sleeved clothing, Chemical resistant apron.

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	**Odor**	Slight chlorine
Appearance	Light yellow	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ • Method**
pH	>13	No data available
Melting point/freezing point	No data available	No data available
Boiling Point/Range	No data available	No data available
Flash Point	No data available	No data available
Evaporation rate	No data available	No data available
Flammability (solid, gas)	No data available	No data available
Flammability Limit in Air		No data available
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor Pressure	No data available	No data available
Vapor Density	1.3 g/mL	No data available
Specific Gravity	1.29	No data available
Water Solubility	soluble	No data available
Partition coefficient: n-octanol/water	No data available	No data available
Autoignition Temperature	No data available	No data available
Decomposition temperature	No data available	No data available
Viscosity of Product	No data available	No data available

Other information

Density 1.3 g/mL

10. STABILITY AND REACTIVITY

Reactivity
May react with other chemicals. Do not mix with other chemicals except as directed on label.

Chemical Stability
Stable under normal conditions.

Possibility of hazardous reactions
May develop chlorine if mixed with acidic solutions. May spatter and release heat if mixed with acids. May react with and cause damage to soft metals such as aluminum, copper, brass or zinc (galvanized) to produce flammable, potentially explosive, hydrogen gas.

Conditions to Avoid
Product may degrade if exposed to long-term high temperature.

Incompatible Materials
Acids, light metals (e.g. aluminum, copper, brass, zinc galvanized).

Hazardous decomposition products
Chlorine.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eyes Corrosive to the eyes and may cause severe damage including blindness.
Skin Extremely corrosive and destructive to tissue.
Ingestion Ingestion causes burns of the upper digestive and respiratory tracts.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 861.00
ATEmix (dermal) 8,254.00

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Sodium hypochlorite 7681-52-9	= 8200 mg/kg (Rat)	10000 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation Causes burns

Serious eye damage/eye irritation Causes eye burns

Sensitization None known

Mutagenic effects None known

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive Effects None known

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration Hazard None known

12. ECOLOGICAL INFORMATION

Ecotoxicity
If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea
Potassium hydroxide 1310-58-3	-	80: 96 h Gambusia affinis mg/L LC50 static	-	-
Sodium hypochlorite 7681-52-9	0.095: 24 h Skeletonema costatum mg/L EC50	LC50 (96 h) 0.06 mg/l	-	2.1: 96 h Daphnia magna mg/L EC50 0.033 - 0.044: 48 h

				Daphnia magna mg/L EC50 Static

Persistence and degradability
No information available.

Bioaccumulation/Accumulation
No information available.

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Dispose of in accordance with local regulations. Should not be released into the environment.

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT

UN-No	1760
Proper Shipping Name	Corrosive liquid, n.o.s (Potassium hydroxide)
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Preparation Date: 13-Mar-2017

Revision Date: 08-Jun-2018
Revision Note: No information available.
Disclaimer
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relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet