

Duo Alk

SAFETY DATA SHEET

Preparation Date: 05-Dec-2007

Revision Date: 08-Jun-2018

Revision Number: 5

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

Product Identifier

Product Name Duo Alk

Other means of identification

Item#: CAN6590

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

Label Elements

DANGER

Hazard statements

Harmful if swallowed

Harmful in contact with skin

Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray

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. Immediately call a POISON CENTER or doctor.

IF ON SKIN: Wash with plenty of water and soap. Wash contaminated clothing before reuse. Call a POISON CENTER or doctor if you feel unwell.

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

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do not induce vomiting.

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	7 - 13*
Sodium hydroxide	1310-73-2	15 - 40*

*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. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
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.

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

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

Hazardous Combustion Products

No information available.

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 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Use personal protective equipment. 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
Sodium hydroxide 1310-73-2	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	Cloudy	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ • Method</u>
pH	12	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	No data available	No data available
Specific Gravity	1.46	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 1.5 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) 538.00

ATEmix (dermal) 1,391.00

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Sodium hydroxide 1310-73-2	2000 mg/Kg	1350 mg/kg	-

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	Contains no ingredient listed as a carcinogen
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 hydroxide 1310-73-2	-	LC50 (96 h) 72 mg/L	-	-

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**

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

Contaminated Packaging

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

14. TRANSPORT INFORMATION**DOT**

UN-No	3266
Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s (Sodium hydroxide Potassium hydroxide)
Hazard Class	8
Packing Group	II

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: 05-Dec-2007

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Revision Note: No information available.

Disclaimer

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End of Safety Data Sheet