

## 1. Identification

Product name	SOLUTION HD	Code	4 L: 30S OLULAVVAIS HD04 20 L: 30S OLULAVVAIS HD20
Use	DÉTERGENT CONCENTRÉ POUR LAVE-VAISSELLE		
Supplier	Servitech Xpert C.P. 2, St-Constant, (Québec) J5A 2G1		

Number: CANUTEC (613) 996-6666

## 2. Hazard identification

Product classification	Serious eye damage / Eye irritation - Category 1 Skin corrosion / irritation - Category 1 Carcinogenicity - Category 2 Corrosive to metals - Category 1
Signal word	Danger
Hazard statement	H318 - Causes serious eye damage. H314 - Causes severe skin burns and eye damage. H351 - Suspected of causing cancer. H290 - May be corrosive to metals.

Pictogram



Precautionary statement	<p>P201 - Obtain special instructions before use.</p> <p>P202 - Do not handle until all safety precautions have been read and understood.</p> <p>P234 - Keep only in original container.</p> <p>P260 - Do not breathe dust/fumes/gas/mist/vapours/spray.</p> <p>P264 - Wash hands and face thoroughly after handling.</p> <p>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P308+P313 - If exposed: Call a POISON CENTER or doctor/physician.</p> <p>P301+P330 +P331 - <b>IF SWALLOWED</b>: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361 +P353 - <b>IF ON SKIN (or hair)</b>: Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P363 - Wash contaminated clothing before reuse.</p> <p>P304+P340 - <b>IF INHALED</b>: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 - <b>IF IN EYES</b>: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.</p> <p>P310 - Immediately call a POISON CENTER or a doctor.</p> <p>P390 - Absorb spillage to prevent material damage.</p> <p>P405 - Store locked up.</p> <p>P501 - Dispose of contents / container according to all applicable regulations</p>
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### 3. Composition / Information on ingredients

Ingredient name	Cas number	% (w/w)
Sodium hydroxide	1310-73-2	7 - 13
Sodium nitriacetate	5064-31-3	10 - 30
Potassium hydroxide	1310-58-3	1 - 5

Exact percentages are being withheld as trade secret information

### 4. First-aid measures

Eyes contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 30 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.
Inhalation	In case of inhalation of vapors or mists, bring the person to an airborne place. Immediately transfer to the closest emergency medical service if breathing is difficult. Symptoms of pulmonary edema may appear after a delay of several hours and are aggravated by physical effort. Rest and medical supervision are therefore essential.
Ingestion	In case of ingestion, rinse mouth. drink a glass of water. Do not induce vomiting and see a doctor. Never administer anything orally to someone unconscious or in a convulsive state.
Most important symptoms and effects	See section 11.
Indication of immediate medical attention and special treatment needed	No further information available.

### 5. Fire-fighting measures

Suitable extinguishing media	To fight a fire, use extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Do not use a water jet.
Specific hazards arising from the chemical	No further relevant information available.
Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear protective equipment listed in section 8. Keep unnecessary personnel and unprotected persons away.
Methods and materials for containment and cleaning up.	Isolate area. Keep unnecessary personnel away. Ensure adequate ventilation. Stop the flow of material, if this is without risk. Absorb with inert material such as vermiculite, sand or soil. Put in adequate container. Wash contaminated area.

### 7. Handling and storage

Precautions for safe handling	Put on appropriate personal protective equipment (see section 8). Use in a way to prevent splashing. Eating, drinking and smoking should be prohibited in areas where this material is handled or stored. Workers should wash hands and face before eating, drinking and smoking. Keep in the original container or an approved alternative, kept tightly closed when not in use. Do not reuse empty container.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls / Personal protection

### Occupational exposure limits (by ingredients)

Ingredient name	TWAEV	STEV
Sodium hydroxide	-	P 2 mg/m <sup>3</sup>
Sodium nitriacetate	-	-
Potassium hydroxide	-	P 2 mg/m <sup>3</sup>

Source of data : RSST

P = ceiling value that should not be exceeded for any amount of time.

Appropriate engineering controls      Use only with ventilation adequate to keep air concentration below STEV if use generates vapor or mists. If STEV is exceeded, wear NIOSH approved respirator.

### Individual protection measures

Eyes & face      Wear chemical goggles and face shield.  
Skin      Wear impervious gloves and impervious apron.  
Respiratory      If airborne exposures cannot be kept below permissible exposure limits, use a NIOSH approved respiratory protection.  
Other      Provide eye wash facility and safety shower near the places where the product is used.  
Normal work clothes (long-sleeved shirt, long pants and closed shoes) are recommended.  
Contact lenses should not be worn when handling this product.

## 9. Physical and chemical properties

Physical state	Liquid	Evaporation rate	Not available	Relative density	1.278
Colour	Red	Flammability	Not flammable	Solubility	Soluble in water
Odour	Odorless	Upper flammability limits	Not available	Partition coefficient - n-octanol/water	Not available
Odour threshold	Not available	Lower flammability limits	Not available	Auto-ignition temperature	Not available
pH	>13	Upper explosive limits	Not available	Decomposition temperature	Not available
Melting point	Not available	Lower explosive limits	Not available	Viscosity	Not available
Initial boiling point and boiling range	Not available	Vapour pressure	Not available		
Flash point	Not applicable	Vapour density	Not available		

## 10. Stability and reactivity

Reactivity      Strong exothermic reaction upon contact with an acid. Splashing and vapor eruption may occur. Contact with water releases large amount of heat. In contact with soft metal such as aluminum, a reaction occurs releasing hydrogen, an explosive gas.

Chemical stability      Stable under normal conditions.

Possibility of hazardous reactions      Exothermic reaction upon contact with acid.

Conditions to avoid      Avoid freezing.

Incompatible materials      Acids, soft metals.

Hazardous decomposition products      In contact with soft metals, hydrogen gas.

## 11. Toxicological information

### Potential Health Effects

Eyes contact	Corrosion of the eyes. Can provoke damage to the eyes that leads to blindness.
Skin contact	This product is irritating and corrosive to the skin. It causes severe burns with deep ulcerations. Irritative contact dermatitis may occur in repeated contact with this product or its solutions. Dermatitis may cause redness, itching, peeling and papules. Exposure to dust or fog can cause multiple small burns on the skin with a temporary loss of hair.
Inhalation	Inhalation immediately irritating to the respiratory tract. Swelling or spasms of the larynx leading to upper-airway obstruction and asphyxia can occur after high-dose inhalation. Inflammation of the lungs and an accumulation of fluid in the lungs may also occur.
Ingestion	Corrosion of the digestive tract with severe pain, dyspnea, vomiting, nausea, possible perforation of the esophagus and stomach. The effects can lead to death.
Chronic Exposure	Carcinogenicity : IARC 2B, the agent (mixture) is possibly carcinogenic to humans.

### Acute toxicity (per ingredient)

Ingredient	Acute toxicity
Sodium hydroxide	LD 50 Oral : 500 mg/kg, Rabbit LD 50 Dermal : 1350 mg/kg, Rabbit
Sodium nitriloacetate	LD 50 Oral : 681 mg/kg, Mouse
Potassium hydroxide	LD 50 Oral : 273 mg/kg, Rat

## 12. Ecological information

Ecotoxicity	No further relevant information available.
Persistence and degradability	No further relevant information available.
Bioaccumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.

## 13. Disposal considerations

Disposal methods	Dispose of contents/container in accordance with local / regional / national / international regulations.
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## 14. Transport information

### TDG Classification

UN Number	Shipping name	Class	Packing group
UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)	8	II

## 15. Regulatory information

WHMIS classification	Serious eye damage / Eye irritation - Category 1 Skin corrosion / irritation - Category 1 Carcinogenicity - Category 2 Corrosive to metals - Category 1
Other applicable regulations	No further data available.

## 16. Other information

Date of issue 10/5/2017  
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### Notice to reader

The information provided in this Safety Data Sheet is accurate to the best of our knowledge, and information available at the date of publication. The information is only designed as a guidance for safe handling, use, transport, storage and disposal.

Use of this product should be performed with caution as there are risks and hazards for people and goods, which are detailed but are not limited in this MSDS. To reduce the risks and dangers with this product is the responsibility of the user to comply with instructions and all instructions provided in the MSDS of this product. The manufacturer, distributors and suppliers of this product are exempt from any liability for any loss or damages of any kind whatsoever resulting from the use of this product that does not comply with the instructions or to all instructions provided in this MSDS or resulting from careless use of this product.