

Section 1. Identification

Product identifier : KO+

Other means of identification : Codes : 2003974, 2003975, 2003976
DIN : 02460629

Recommended use and restrictions on use : Cleaner degreaser disinfectant

Supplier identifier : Les Produits Sanitaires Lépine inc.
1105 Bersimis
Chicoutimi, Qc
G7K 1A4
Phone : 418-545-0794
www.produitslepine.com

Emergency telephone number : CANUTEC : +1-613-996-6666 or *666 (cell phone)
24/7

Section 2. Hazard identification

Hazard classification of substance or mixture : This product is subject to the Food and Drugs Act and is not subject to the requirements of WHMIS 2015.

Precaution : KEEP OUT OF REACH OF CHILDREN. Can cause eye damage and severe skin irritation. Do not get in eyes, on skin or clothing. Wear goggles or face shield and rubber gloves when handling. Harmful if swallowed. Avoid contamination of food.

Section 3. Composition/information on ingredients

Substance/material : Mixture

Chemical name	Common name	% (w/w)	CAS number
Alcohol ethoxylate		3 - 7	34398-01-1
N-alkyl (68% C ₁₂ , 32% C ₁₄) dimethylethyl benzyl ammonium chloride		1 - 5	85409-23-0
N-alkyl (5% C ₁₂ , 60% C ₁₄ , 30% C ₁₆ , 5% C ₁₈) dimethyl benzyl ammonium chloride		1 - 5	68391-01-5

The actual concentration or concentration range is withheld as a trade secret.

Based on current knowledge of the supplier and in the concentrations applicable, no other ingredients present are classified as hazardous to health or the environment, therefore would require reporting in this section.

Occupational exposure limits, where available, are listed in section 8.

Section 4. First-aid measures

First aid instructions : In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash all contaminated clothing before re-use. If swallowed, do not induce vomiting. Drink a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician or poison control centre immediately. Take container, label or product name and Registration Number with you when you seek medical attention

Note to physician : Probable mucosal damage may contraindicate the use of gastric lavage.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media :

Water fog, foam, dry chemical powder, carbon dioxide (CO₂).

Unsuitable extinguishing media :

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazard arising from the hazardous product :

No specific risk of fire or explosion.

Hazardous combustion products :

During fire, gases hazardous to health may be formed.

Precautions for fire-fighters :

Move containers from fire area if you can do so without risk.

Protective equipment for fire-fighters :

It is important that firefighters wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a positive pressure face shield.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures :

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up :

Contain spill for neutralization, in order to prevent environmental contamination. Keep away from sewers or waterways. The small quantities must be removed, wiped and used, when it's possible. For general purpose cleaning, or drain in the sanitary sewers if the municipal and provincial regulations permit it. Recover the abundant quantities with vermiculite or all other absorbent, and eliminate as industrial waste. If the product flowed in the nature inform the municipal, provincial and federal authorities as required by law.

Section 7. Handling and storage

Precautions for safe handling

Protective measures :

Do not get this material in contact with eyes. Avoid contact with skin. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.

Advice on general hygiene at work :

Refer to Section 8 for information on hygiene measures.

Conditions for safe storage (including incompatible materials) :

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. Store in a dry place no lower in temperature than 10°C or higher than 50°C. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Section 8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits :

Name of product or ingredient	Exposure limits - ACGIH	Exposure limits - OSHA	Immediately dangerous to life or health - IDLH
None	None	None	None

Appropriate engineering controls :

General mechanical ventilation.

Individual protection measures

Hygiene measures :

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Eye / face protection :	Wear eye protection such as protective glasses.
Skin protection :	
Hand protection :	Wear appropriate chemical resistant gloves.
Body protection :	None required in normal use.
Other skin protection :	None required in normal use.
Respiratory protection :	In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9. Physical and chemical properties

Appearance :	Red liquid
Odour :	Citrus
Odour threshold :	Not available
pH :	11,7 ± 0,4
Melting point/Freezing point :	Not available
Initial boiling point : :	Not available
Flash point :	>93°C (>199,4°F)
Evaporation rate :	Slower than ethyl ether
Flammability (solids and gases) :	Not applicable
Lower and upper flammability/explosive limit :	Not available
Vapour pressure :	Not available
Vapour density :	Not available
Relative density :	1,032 ± 0,004 g/ml
Solubility :	Easily soluble in the following materials : cold and hot water
Partition coefficient n-octanol/water :	Not available
Auto-ignition temperature :	Not available
Decomposition temperature :	Not available
Viscosity :	Not available

Section 10. Stability and reactivity

Reactivity :	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability :	The product is stable.
Possibility of hazardous reactions :	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid :	Avoid temperatures exceeding the flash point. Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals.
Incompatible materials :	Reactive or incompatible with the following materials: strong oxidizing agents, anionic surfactants.
Hazardous decomposition products :	Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.

Section 11. Toxicological information

This product is subject to the Food and Drugs Act and is not subject to the requirements of WHMIS 2015.

Information on toxicological effects

Toxicological data :

Name of product or ingredient	Result	Species	Dosage	Exposure	Observation
KO+	LD50 Oral	Rat	>5000 mg/kg	-	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-	-

Sensitization : This product is not expected to cause skin sensitization.

Mutagenicity : No data available

Carcinogenicity : This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Toxicity to reproduction : This product is not expected to cause reproductive effects.

Teratogenicity : This product is not expected to cause developmental effects.

Systemic toxicity for some target organs – single exposure : May cause damage to organs.

Target organ toxicity – repeated exposure : No data available

Section 12. Ecological information

Ecotoxicity :

Name	Results	Species	Exposure
Not available	Not available	Not available	Not available

Persistence and degradability : Not available

Bioaccumulative potential : Not available

Mobility in soil : Not available

Other adverse effects : Not available

Section 13. Disposal considerations

Disposal methods : Do not contaminate water, food, or feed by storage and disposal. Store in a dry place no lower in temperature than 10°C or higher than 50°C. Rinse the emptied container thoroughly. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the Provincial Regulatory Agency or the Manufacturer.

Section 14. Transport information

UN number : UN3082

UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIS, N.O.S.(quaternary ammonium chloride)

Packing group : 9

Environmental hazards : III

Special precautions : Special Provision 99: All the requirements of Parts 3 to 16 for the Transportation of Dangerous Goods Regulations (TDGR) are exempt.
Transport with local users: Always transport in containers that are correct and secure. Ensure that persons transporting the product know what to do in case of accident or spillage.

Section 15. Regulatory information

This product is subject to the Food and Drugs Act.

DIN : 02460629

Section 16. Other information

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<u>Prepared by :</u>	The research and development department of Produits Sanitaires Lépine inc.
<u>Legend of abbreviations :</u>	ATE = Acute toxicity estimate SDS = Safety Data Sheet UN = United Nations HPR = Hazardous Products Regulations GHS = Globally Harmonized System of Classification and Labelling of Chemicals TDG : Transportation of Dangerous Goods CAS : Chemical Abstract Services TWA : Time-Weighted Average STEL : Short-Term Exposure Limit IDLH : Immediately dangerous to life or health LC : Lethal Concentration LD : Lethal Dose EC : Effective Concentration

Notice to reader :

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