

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture : Mixture

Name	CAS number	% (w/w)
Alcohols, C7-21, ethoxylated	68991-48-0	5 - 10
tetrapotassium pyrophosphate	7320-34-5	1 - 5
disodium metasilicate	6834-92-0	1 - 5
potassium hydroxide	1310-58-3	0.1 - 1

Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

Description of required first aid measures

Eye contact	In case of contact with eyes, flush with fresh water. Check for and remove any contact lenses. Continue rinsing. If irritation persists, get medical attention.
Skin contact	In case of irritation, rinse with water. Get medical attention if irritation persists.
Ingestion	Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Inhalation	Move victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe. Maintain an open airway.

Most important symptoms/effects, acute and delayed

Eye contact	Adverse symptoms may include the following: pain or irritation watering redness
Skin contact	Adverse symptoms may include the following: irritation redness
Ingestion	No specific symptoms under normal use conditions.
Inhalation	No specific symptoms under normal use conditions.

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See toxicological information (Section 11)

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Decomposition products may include the following materials: phosphorus oxides metal oxide/oxides
Special fire-fighting procedures	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action should be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Initiate spill response procedures if required.
Personal protection	Put on appropriate personal protective equipment (see Section 8).
Cleaning method	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use a water rinse for final clean-up.

7. HANDLING AND STORAGE

Handling	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See Section 8 for additional information on hygiene measures.
Storage and Incompatibility	Store in accordance with local regulations. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep out of reach of children. Store away from incompatible materials (see Section 10).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Ingredient name	Exposure limits
potassium hydroxide	CA Alberta Provincial (Canada, 4/2009). Skin sensitizer. C: 2 mg/m ³ CA British Columbia Provincial (Canada, 6/2017). C: 2 mg/m ³ CA Ontario Provincial (Canada, 7/2015). C: 2 mg/m ³ CA Quebec Provincial (Canada, 1/2014). STEV: 2 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). CEIL: 2 mg/m ³

Appropriate engineering controls Good general ventilation should be sufficient to control worker exposure to airborne contaminants that could arise from the use of this product.

Individual protection measures

Eye/face protection It is minimally suggested to wear safety glasses while using or handling this product.

Hands and Body protection It is suggested to wear chemical-resistant gloves while using or handling this product.

Respiratory protection No specific protective equipment required under normal use conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid. [Limpid liquid]	pH	13.5	Flash point	[Product does not sustain combustion.]
Color	Straw.	Relative density	1.085	Melting point	Not available.
Odor	Odorless.	Viscosity	Not available.	Boiling point	Not available.
Odor threshold	Not available.	Vapor pressure	Not available.	Fire point	: Not available.
Solubility in water	: Not available.	Vapor density	: Not available.	Evaporation rate	: Not available.
Decomposition temperature	: Not available.	Auto-ignition temperature	: Not available.		
Partition coefficient: n-octanol/water	: Not available.	Flammability (solid, gas)	: Not available.		
Lower and upper explosive (flammable) limits	: Not available.				

10. STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	The product is stable.
Incompatible materials	Reactive or incompatible with acids.
Conditions to avoid	No specific data.
Possibility of hazardous reactions	May cause an exothermic reaction in presence of acids.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Route of exposure	Routes of entry anticipated: Dermal. Routes of entry not anticipated: Oral, Inhalation.	
Eye contact	cause eye irritation	<u>Potential acute health effects</u> <u>Symptoms</u> Adverse symptoms may include the following: pain or irritation watering redness
Skin contact	May cause skin irritation.	Adverse symptoms may include the following: irritation redness
Ingestion	No known significant effects or critical hazards.	No specific symptoms under normal use conditions.
Inhalation	No known significant effects or critical hazards.	No specific symptoms under normal use conditions.

Toxicity data

Product/ingredient name	Result	Species	Dose	Exposure
Alcohols, C7-21, ethoxylated	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
tetrapotassium pyrophosphate	LD50 Dermal	Rabbit	>4640 mg/kg	-
	LD50 Oral	Rat	1001 mg/kg	-
disodium metasilicate	LD50 Oral	Rat	1153 mg/kg	-
potassium hydroxide	LD50 Oral	Rat	273 mg/kg	-

Information on toxicological effects

Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Sensitization	Not available.
Carcinogenicity	No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

Ecotoxicity data

Product/ingredient name	Result	Species	Exposure
Alcohols, C7-21, ethoxylated	Acute EC50 5.3 mg/l Acute LC50 70.1 mg/l	Daphnia Fish	48 hours 48 hours
disodium metasilicate	Acute EC50 33.53 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
potassium hydroxide	Acute LC50 2320 ppm Fresh water Acute LC50 80 ppm Fresh water	Fish - Gambusia affinis - Adult Fish - Gambusia affinis - Adult	96 hours 96 hours

Persistence and degradability : Unknown **Bioaccumulative potential** : Unknown **Mobility in soil** : Unknown **Other adverse effects** : Unknown

13. DISPOSAL CONSIDERATIONS

Disposal methods Dispose content and container in accordance with local, regional and national regulation in force.

14. TRANSPORT INFORMATION

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	TDG Placard
TDG Classification	UN1760	Corrosive liquid, n.o.s. (potassium hydroxide)	8	III	

Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8).

