

PRODUCT SAFETY DATA SHEET



HEALTH • HYGIENE • HOME

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

FINISH Professional Liquid Regular
Contains Potassium Hydroxide. Sodium Hypochlorite

1.2. Relevant identified uses of the substance or mixture and uses advised against

Detergent for use in domestic automatic dishwashers

1.3. Details of the Supplier of the Safety Data Sheet

The United Kingdom:

RB UK Commercial Ltd
Wellcroft House
Wellcroft Road
Slough
Berkshire
SL1 4AQ

The Republic Of Ireland:

Reckitt Benckiser Ireland Ltd
7 Riverwalk
Citywest Business Campus
Dublin 24
Ireland

1.4 Emergency telephone number

RB UK Contact Telephone: 0845 769 7079 **RB ROI Contact Telephone:** 01 661 7318

Only available during the following office hours: 09:00 - 17:00 weekdays

RB Contact Email: consumer.relations-ukroi@rb.com

Poisons Information Centre of Ireland: 01 809 2166 8am-10pm 7 days a week

Revision Date:	Revision	Replacing	RB Ref No:
1 August 2017	6	3522134705 of 01 Feb 2017	3522134706

Revisions: Updated data sheet, multiple changes

Additional useful information

Product Format: Colourless liquid

Product Identification Code

i03635-01002-GHS05

UN Transport Code UN: 3266

Class & Packing Group 8 II

Proper Shipping Name CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, Sodium hypochlorite, solution)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Met. Corr. 1, H290

Skin Corr. 1A, H314

Eye Dam. 1, H318

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms

:



Signal word

: Danger

Hazard statements

: May be corrosive to metals.
Causes severe skin burns and eye damage.
Harmful to aquatic life with long lasting effects.

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep only in original container. Avoid release to the environment.

Response

: **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. **IF SWALLOWED:** Immediately call a POISON CENTER or physician. Do NOT induce vomiting. **IF ON SKIN (or hair):** Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. **IF IN EYES:** Immediately call a POISON CENTER or physician.

Storage

: Store locked up.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients

: Potassium hydroxide

Supplemental label elements

: Warning! Do not use together with other products. May release dangerous gases (chlorine).

Ingredient Declaration

5 - 15% Phosphates
< 5 % Chlorine-based bleaching agents
< 5 % Polycarboxylate

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

: Yes, applicable.

Tactile warning of danger

: Yes, applicable.

2.3 Other hazards

Other hazards which do not result in classification

: None known.

Additional information

: Short term Skin Bleaching agent. IF ON SKIN: Rinse skin with water.

Additional guidance

: Do not mix with household chemicals . May release dangerous gases (chlorine).

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Potassium hydroxide	REACH #: 01-2119487136-33 EC: 215-181-3 CAS: 1310-58-3 Index: 019-002-00-8	≥10 - ≤22	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1A, H314 Eye Dam. 1, H318	[1]
Silicic acid, sodium salt	REACH #: 01-2119448725-31 EC: 215-687-4 CAS: 1344-09-8	≤3	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	[1]
sodium hypochlorite	REACH #: 01-2119488154-34 EC: 231-668-3 CAS: 7681-52-9 Index: 017-011-00-1	<2.5	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH031 See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SECTION 4: First aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
phosphorus oxides
halogenated compounds
metal oxide/oxides

5.3 Advice for firefighters

SECTION 5: Firefighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : 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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Absorb spillage to prevent material damage. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

SECTION 7: Handling and storage

Advice on general occupational hygiene : 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 also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a corrosion resistant container with a resistant inner liner. Store locked up. 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.

Seveso Directive - Reporting thresholds (in tonnes)

Named substances

Name	Notification and MAPP threshold	Safety report threshold
Mixtures of sodium hypochlorite classified as Aquatic Acute Category 1 [H400] containing less than 5 % active chlorine and not classified under any of the other hazard categories in Part 1 of Annex I.	200	500

7.3 Specific end use(s)

Recommendations : Professional uses

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Potassium hydroxide	MZCR PEL/NPK-P (Czech Republic, 1/2013). TWA: 1 mg/m ³ 8 hours. STEL: 2 mg/m ³ 15 minutes. AFS 2011:18 (Sweden, 12/2011). TWA: 1 mg/m ³ 8 hours. Form: Inhalable dust CEIL: 2 mg/m ³ 15 minutes. Form: Inhalable dust INSHT (Spain, 1/2014). STEL: 2 mg/m ³ 15 minutes. Arbejdstilsynet (Denmark, 10/2012). CEIL: 2 mg/m ³ Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014). CEIL: 2 mg/m ³ NAOSH (Ireland, 12/2011). OELV-15min: 2 mg/m ³ 15 minutes. SUVA (Switzerland, 1/2014). TWA: 2 mg/m ³ 8 hours. Form: Inhalable dust (total dust) FOR-2011-12-06-1358 (Norway, 1/2013). CEIL: 2 mg/m ³ EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 2 mg/m ³ 15 minutes.

SECTION 8: Exposure controls/personal protection

25/2000. (IX. 30.) EüM-SzCsM együttes rendelet (Hungary, 12/2011).
TWA: 2 mg/m³ 8 hours.
PEAK: 2 mg/m³ 15 minutes.

Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz.U. 2014 poz. 817) (Poland, 6/2014).
TWA: 0.5 mg/m³ 8 hours.
STEL: 1 mg/m³ 15 minutes.

Töökeskkonna keemiliste ohutegurite piirnõrmi määrus nr 293 (Estonia, 1/2008).
TWA: 2 mg/m³ 8 hours.

Instituto Português da Qualidade (Portugal, 11/2014).
CEIL: 2 mg/m³

Υπουργείο Εργασίας και Κοινωνικών Υποθέσεων (Greece, 2/2012).
TWA: 2 mg/m³ 8 hours.
STEL: 2 mg/m³ 15 minutes.

Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014).
M: 2 mg/m³

България Министерство на труда и социалната политика и Министерството на здравеопазването (Bulgaria, 1/2012).
Limit value 8 hours: 2 mg/m³ 8 hours.

HG 1218/2006 cu modificările și completările ulterioare (Romania, 1/2012).
VLA: 1 mg/m³, (expressed as sodium hydroxide) 8 hours.
Short term: 3 mg/m³, (expressed as sodium hydroxide) 15 minutes

РО МинЗдраСоц ПДК (Russian Federation, 9/2011).
CEIL: 0.5 mg/m³, (as sodium hydrocarbonate) Form: aerosol

GKV_MAK (Austria, 12/2011).
TWA: 2 mg/m³ 8 hours. Form: inhalable fraction

MinGoRP GVI/KGVI (Croatia, 6/2013).
STELV: 2 mg/m³ 15 minutes.

Velferdarráðuneytið, Mengunarmarkaskrá (Iceland, 4/2009).
STEL: 2 mg/m³ 15 minutes.

Ministerio de Trabajo, Empleo y Seguridad Social (Argentina, 11/2003).
CEIL: 2 mg/m³

Ministerio de Salud - TLV (Peru, 7/2005).
CEIL: 2 mg/m³

Menteri Tenaga Kerja dan Transmigrasi (Indonesia, 9/2014).
Absorbed through skin.
STEL: 2 mg/m³ 15 minutes.

Ministère du travail (France, 7/2012). Notes: Ministry of Labour (Brochure INRS Ed 984, July 2012). Indicative exposure limits
STEL: 2 mg/m³ 15 minutes.

DOL OEL (South Africa, 8/1995). Notes: Recommended limit
STEL: 2 mg/m³ 15 minutes.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance

SECTION 8: Exposure controls/personal protection

documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
sodium hypochlorite	DNEL	Short term Inhalation	3.1 mg/m ³	-	Systemic
	DNEL	Short term Inhalation	3.1 mg/m ³	-	Local
	DNEL	Long term Inhalation	1.55 mg/m ³	-	Systemic
	DNEL	Long term Inhalation	0.26 mg/m ³	-	Systemic
	DNEL	Long term Inhalation	1.55 mg/m ³	-	Local
	DNEL	Long term Dermal	0.5 mg/m ³	-	Local

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
sodium hypochlorite	Fresh water	0.21 µg/l	Assessment Factors
	Marine water	0.042 µg/l	Assessment Factors

8.2 Exposure controls

Appropriate engineering controls

- : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

- : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

- : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 8: Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid. [Viscous liquid.]
Color	: Colorless.
Odor	: Characteristic.
Odor threshold	: Not available.
pH	: 13.55 to 13.95
Melting point/freezing point	: <0°C
Initial boiling point and boiling range	: >100°C
Flash point	: Closed cup: >100°C [flash point value based on ingredient data]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Burning time	: Not applicable.
Burning rate	: Not applicable.
Upper/lower flammability or explosive limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Density	: 1.265 to 1.305 g/cm ³ [20°C]
Solubility(ies)	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): 100 mPa·s
Explosive properties	: Not available.
Oxidizing properties	: Not available.
Alkali. Test [g HCl/100g Product]	: corrosive
Corrosivity Remarks	: Not available.

9.2 Other information

Solubility in water : Not available.

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information.

10.3 Possibility of hazardous reactions : Hazardous reactions or instability may occur under certain conditions of storage or use.
Contact with acids liberates toxic gas.

SECTION 10: Stability and reactivity

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : Reactive or incompatible with the following materials:
metals

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Instability Conditions : Keep away from heat and direct sunlight.

Instability temperature : 50°C (122°F)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
potassium hydroxide	LD50 Oral	Rat	273 mg/kg	-
sodium hypochlorite, solution	LD50 Oral	Rat	1100 mg/kg	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Route	ATE value
Oral	4432.6 mg/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
potassium hydroxide	Eyes - Moderate irritant	Rabbit	-	24 hours 1 milligrams	-
	Skin - Severe irritant	Guinea pig	-	24 hours 50 milligrams	-
	Skin - Severe irritant	Human	-	24 hours 50 milligrams	-
Silicic acid, sodium salt	Skin - Severe irritant	Rabbit	-	24 hours 50 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 10 milligrams	-
sodium hypochlorite, solution	Skin - Severe irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	1.31 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-

Skin : Based on Calculation method: Causes Severe Skin Burns (EU).

Eyes : Based on Calculation method: Causes serious eye damage.

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

No known effect according to our database.

Skin : Based on available data, the classification criteria are not met.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

No known effect according to our database.

SECTION 11: Toxicological information

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

No known effect according to our database.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

No known effect according to our database.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

No known effect according to our database.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Silicic acid, sodium salt	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

No known effect according to our database.

Aspiration hazard

No known effect according to our database.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
Inhalation : No known significant effects or critical hazards.
Skin contact : Causes severe burns.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

SECTION 11: Toxicological information

Potential chronic health effects

Not available.

Conclusion/Summary	: Based on available data, the classification criteria are not met.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
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.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
potassium hydroxide Silicic acid, sodium salt	Acute LC50 80 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	Acute EC50 33.53 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
sodium hypochlorite, solution	Acute LC50 494000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 0.67 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
	Acute LC50 56400 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 32 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 32 µg/l Marine water	Fish - Oncorhynchus kisutch - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 0.5 mg/l Marine water	Algae - Isochrysis galbana - Exponential growth phase	96 hours
	Chronic NOEC 0.1 ppm Fresh water	Fish - Cyprinus carpio - Young	30 days

Conclusion/Summary : Based on Calculation method: Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

No known effect according to our database.

Conclusion/Summary : Based on available data, the classification criteria are not met.

12.3 Bioaccumulative potential

No known effect according to our database.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

SECTION 12: Ecological information

PBT : Not applicable.
vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
20 01 15*	Alkalines





Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3266	UN3266	UN3266	UN3266
14.2 UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, sodium hypochlorite, solution, mixture)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, sodium hypochlorite, solution)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (potassium hydroxide, sodium hypochlorite, solution)	Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, sodium hypochlorite, solution)
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	II	II	II	II

SECTION 14: Transport information

14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Hazard identification number 80 Limited quantity 1 L Special provisions 274 Tunnel code (E)	Special provisions 274	Emergency schedules (EmS) F-A, S-B Special provisions 274	The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : All components are listed or exempted.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Named substances

Name
Mixtures of sodium hypochlorite classified as Aquatic Acute Category 1 [H400] containing less than 5 % active chlorine and not classified under any of the other hazard categories in Part 1 of Annex I.

Hazard class for water : 1 Appendix No. 4

15.2 Chemical Safety Assessment : Complete.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	Expert judgment Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H290 H302 H314 H315 H318 H319 H335i H400 EUH031	May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye damage. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life. Contact with acids liberates toxic gas.
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Full text of classifications [CLP/GHS]

Acute Tox. 4, H302 Aquatic Acute 1, H400 Eye Dam. 1, H318 Eye Irrit. 2, H319 Met. Corr. 1, H290 Skin Corr. 1A, H314 Skin Corr. 1B, H314 Skin Irrit. 2, H315 STOT SE 3, H335i EUH031	ACUTE TOXICITY: ORAL - Category 4 AQUATIC TOXICITY (ACUTE) - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 CORROSIVE TO METALS - Category 1 SKIN CORROSION/IRRITATION - Category 1A SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [Respiratory tract irritation] - Category 3 Contact with acids liberates toxic gas.
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In no way does this document remove the need of the recipient of the product to fully understand and apply statutory requirements. It is the recipient's sole responsibility to take due precautions relative to the use made of the product. All information contained herein is only to assist the recipient in fulfilling their statutory duty connected with the use of hazardous materials.

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