



PRODUCT SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Harpic White & Shine Citrus Fresh

SDS number: PSDS9803328

Code: FRM50024247 / 3038061

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

Disinfectants and algacides not intended for direct application to humans or animals

Consumer Use

Professional use

See Annex to the Safety data sheet for additional information in the Exposure Scenario(s).

1.3. Details of the Supplier of the Safety Data Sheet

The United Kingdom:

RB UK Hygiene Home Commercial Ltd

Wellcroft House

Wellcroft Road

Slough, Berkshire SL1 4AQ

Tel: 0800 376 8181

Email: consumer.relations-ukroi@rb.com

The Republic Of Ireland:

RB Ireland Hygiene Home Commercial Ltd

7 Riverwalk

Citywest Business Campus

Dublin 24

Ireland

Tel: 01 661 7318

Email: consumer.relations-ukroi@rb.com

1.4 Emergency telephone number

GB - NHS 111/NHS 24 Tel: 111

NI - www.gpoutofhours.hscni.net/

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

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. 1, 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

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

Prevention : Wash hands thoroughly after handling.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage : Store locked up.

Disposal : Dispose of contents/container in accordance with local and national regulations.

Hazardous ingredients : SODIUM HYPOCHLORITE
SODIUM HYDROXIDE

Supplemental label elements : WARNING! Do not use together with other products. May release dangerous gases (chlorine).

Ingredient Declaration:

Per 100g of product contains 2.0g sodium hypochlorite.
Contains less than 5% chlorine based bleaching agents, anionic surfactants and non-ionic surfactants.
Disinfectant
Perfume

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Yes, applicable.

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

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SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
SODIUM C12-14 PARETH-3 SULFATE	REACH #: 01-2119488639-16 EC: 500-234-8 CAS: 68891-38-3	≤5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	-	[1]
SODIUM HYPOCHLORITE	REACH #: 01-2119488154-34 EC: 231-668-3 CAS: 7681-52-9 Index: 017-011-00-1	≤2.3	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH031	M [Acute] = 10 M [Chronic] = 1 EUH031: C ≥ 5%	[1]
SODIUM HYDROXIDE	REACH #: 01-2119457892-27 EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6	≤3	Skin Corr. 1A, H314 Eye Dam. 1, H318	Skin Corr. 1A, H314: C ≥ 5% Skin Corr. 1B, H314: 2% ≤ C < 5% Skin Irrit. 2, H315: 0.5% ≤ C < 2% Eye Dam. 1, H318: C ≥ 2% Eye Irrit. 2, H319: 0.5% ≤ C < 2%	[1] [2]
Amines, C12-14-alkyldimethyl, N-oxides	REACH #: 01-2119490061-47 CAS: 308062-28-4	<1	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 1064 mg/kg M [Acute] = 1	[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

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.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. 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 : 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 combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
halogenated compounds
metal oxide/oxides

5.3 Advice for firefighters

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.

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SECTION 6: Accidental release measures

- 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. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.
- 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

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. Separate from acids. Keep away from metals. 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. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

- Recommendations** : Toilet bowl cleaner Consumer use
Professional use
See Annex to the Safety data sheet for additional information in the Exposure Scenario(s).
- 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
SODIUM HYDROXIDE	EU OEL (Europe, 8/2007). STEL: 2 mg/m ³ 15 minutes.

- Recommended monitoring procedures** : 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

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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 C12-14 PARETH-3 SULFATE	DNEL	Long term Dermal	2750 mg/kg	Workers	Systemic	
	DNEL	Long term Inhalation	175 mg/m ³	Workers	Systemic	
	DNEL	Long term Dermal	1650 mg/kg	General population [Consumers]	Systemic	
	DNEL	Long term Inhalation	52 mg/m ³	General population [Consumers]	Systemic	
	DNEL	Long term Oral	15 mg/kg	General population [Consumers]	Systemic	
	DNEL	Long term Dermal	0.079 mg/cm ²	General population	Local	
	DNEL	Long term Dermal	0.132 mg/cm ²	Workers	Local	
	DNEL	Long term Oral	15 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Inhalation	52 mg/m ³	General population	Systemic	
	DNEL	Long term Inhalation	175 mg/m ³	Workers	Systemic	
	DNEL	Long term Dermal	1650 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	2750 mg/kg bw/day	Workers	Systemic	
	SODIUM HYPOCHLORITE	DNEL	Long term Oral	0.26 mg/kg bw/day	General population	Systemic
		DNEL	Long term Inhalation	1.55 mg/m ³	General population	Local
DNEL		Long term Inhalation	1.55 mg/m ³	General population	Systemic	
DNEL		Long term Inhalation	1.55 mg/m ³	Workers	Local	
DNEL		Long term Inhalation	1.55 mg/m ³	Workers	Systemic	
DNEL		Short term Inhalation	3.1 mg/m ³	General population	Local	
DNEL		Short term Inhalation	3.1 mg/m ³	General population	Systemic	
DNEL		Short term Inhalation	3.1 mg/m ³	Workers	Local	
DNEL		Short term Inhalation	3.1 mg/m ³	Workers	Systemic	
DNEL		Long term Dermal	0.5 %	General population	Local	
SODIUM HYDROXIDE		DNEL	Long term Dermal	0.5 %	Workers	Local
		DNEL	Long term Inhalation	1 mg/m ³	Workers	Local
		DNEL	Long term Inhalation	1 mg/m ³	General population [Consumers]	Local
		DNEL	Short term Dermal	2 %	Workers	Local
	DNEL	Short term Dermal	2 %	General population [Consumers]	Local	

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SECTION 8: Exposure controls/personal protection

Amines, C12-14-alkyldimethyl, N-oxides	DNEL	Long term Inhalation	1 mg/m ³	General population	Local
	DNEL	Long term Inhalation	1 mg/m ³	Workers	Local
	DNEL	Long term Dermal	11 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	15.5 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.27 %	Workers	Local
	DNEL	Long term Dermal	5.5 mg/kg	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	3.8 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.44 mg/kg	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.44 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.53 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	5.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	6.2 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	11 mg/kg bw/day	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
SODIUM C12-14 PARETH-3 SULFATE	Fresh water	0.24 mg/l	-
	Marine water	0.024 mg/l	-
	Fresh water sediment	5.45 mg/kg	-
	Marine water sediment	0.545 mg/kg	-
SODIUM HYPOCHLORITE	Fresh water	0.21 µg/l	Assessment Factors
	Marine water	0.042 µg/l	Assessment Factors
Amines, C12-14-alkyldimethyl, N-oxides	Fresh water	0.0335 mg/l	-
	Marine water	0.00335 mg/l	-
	Fresh water sediment	5.24 mg/kg	-
	Marine water sediment	0.524 mg/kg	-
	Soil	1.02 mg/kg	-
	Sewage Treatment Plant	24 mg/kg	-
HYDROGEN PEROXIDE	Fresh water	0.013 mg/l	Assessment Factors
	Marine water	0.013 mg/l	Assessment Factors
	Sewage Treatment Plant	4.66 mg/l	Assessment Factors
	Fresh water sediment	0.047 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.047 mg/kg dwt	Equilibrium Partitioning

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

SECTION 8: Exposure controls/personal protection

- 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** : EN 16523-1:2015
Tested for protection against chemical permeation.
Low chemical resistant or waterproof gloves.
(EN 16523-1:2015 supersedes EN 374-3:2003)
EN 374-2:2003
Tested for protection against liquid penetration and micro-organisms.
EN 388:2003
Tested for protection against mechanical risks (abrasion, blade cut resistance, tear resistance and puncture resistance).
ISO 374-1:2016/Type A
Protective glove with permeation resistance of at least 30 minutes each for at least 6 test chemicals.
ISO 374-1:2016/Type B
Protective glove with permeation resistance of at least 30 minutes each for at least 3 test chemicals.
ISO 374-1:2016/Type C
Protective glove with permeation resistance of at least 10 minutes for at least 1 test chemical.
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.
- 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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid. [Viscous]
- Color** : Milky White.
- Odor** : eucalyptus.
- Melting point/freezing point** : Not determined

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SECTION 9: Physical and chemical properties

Initial boiling point and boiling range	: Not determined
Flammability (solid, gas)	: Not determined
Upper/lower flammability or explosive limits	: Not determined
Flash point	: Closed cup: >93.3°C (>199.9°F)
Auto-ignition temperature	: Not determined
Decomposition temperature	: Not determined
pH	: 12.5 to 13.5
Viscosity	: Not determined.
Solubility(ies)	:

Media	Result
cold water	Easily soluble
hot water	Easily soluble

Solubility in water	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	: Not determined
Vapor pressure	: Not determined
Evaporation rate	: Not determined
Relative density	: Not determined
Density	: 1.03 to 1.05 g/cm ³ [20°C (68°F)]
Vapor density	: Not determined
Particle characteristics	
Median particle size	: Not relevant/applicable due to nature of the product.

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 is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: acids metals
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Amines, C12-14-alkyldimethyl, N-oxides	LD50 Oral	Rat	1064 mg/kg	-

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SECTION 11: Toxicological information

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

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Amines, C12-14-alkyldimethyl, N-oxides	1064	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
SODIUM C12-14 PARETH-3 SULFATE	Eyes - Severe irritant	Rabbit	-	-	-
	Skin - Irritant	Rabbit	-	-	-
SODIUM HYPOCHLORITE	Eyes - Mild irritant	Rabbit	-	1.31 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
SODIUM HYDROXIDE	Eyes - Mild irritant	Rabbit	-	400 ug	-
	Eyes - Severe irritant	Monkey	-	24 hours 1 %	-
	Eyes - Severe irritant	Rabbit	-	1 %	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes	-
	Eyes - Severe irritant	Rabbit	-	1 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 50 ug	-
	Skin - Mild irritant	Human	-	24 hours 2 %	-
Skin - Severe irritant	Rabbit	-	24 hours 500 mg	-	

Conclusion/Summary

Skin : Calculation method Causes skin irritation.

Eyes : Calculation method Causes serious eye irritation.

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

Sensitization

Conclusion/Summary

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

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

Mutagenicity

Conclusion/Summary

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

Carcinogenicity

Conclusion/Summary

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

Reproductive toxicity

Conclusion/Summary

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

Teratogenicity

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
SODIUM HYPOCHLORITE	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

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SECTION 11: Toxicological information

Information on the likely routes of exposure : Not available.

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.

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.
Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

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SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
SODIUM HYPOCHLORITE Amines, C12-14-alkyldimethyl, N-oxides	Acute EC50 0.67 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
	Acute EC50 0.01 mg/l Fresh water	Daphnia - Daphnia magna - Embryo	48 hours
	Acute LC50 56.4 mg/l Marine water	Crustaceans - Palaemonetes pugio	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
	Acute EC50 3.1 mg/l	Daphnia	48 hours
	Acute IC50 0.143 mg/l	Algae	48 hours
	Acute LC50 2.67 mg/l	Fish	48 hours
	Acute NOEC 0.067 mg/l	Algae	-

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

12.2 Persistence and degradability

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Amines, C12-14-alkyldimethyl, N-oxides	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
SODIUM C12-14 PARETH-3 SULFATE	0.3	-	low
Amines, C12-14-alkyldimethyl, N-oxides	0.95	-	low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

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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 : The classification of the product may meet the criteria for a hazardous waste.





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 or ID number	UN3266	UN3266	UN3266	UN3266
14.2 UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYPOCHLORITE, SODIUM HYDROXIDE)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYPOCHLORITE, SODIUM HYDROXIDE)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hypochlorite, solution, sodium hydroxide)	Corrosive liquid, basic, inorganic, n.o.s. (sodium hypochlorite, solution, sodium hydroxide)
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.

Additional information

ADR/RID : **Hazard identification number** 80
Limited quantity 1 L
Special provisions 274
Tunnel code (E)

ADN : **Special provisions** 274

IMDG : **Emergency schedules** F-A, S-B
Special provisions 274

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SECTION 14: Transport information

IATA : **Quantity limitation** Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840.
Special provisions A3, A803

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.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

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 : None.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

15.2 Chemical Safety Assessment : No Chemical Safety Assessment has been carried out.

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]

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SECTION 16: Other information

Classification	Justification
Met. Corr. 1, H290 Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	Expert judgment On basis of test data. On basis of test data. Calculation method

Full text of abbreviated H statements

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	AQUATIC HAZARD (ACUTE) - Category 1
Aquatic Chronic 1	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Met. Corr. 1	CORROSIVE TO METALS - Category 1
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Corr. 1A	SKIN CORROSION/IRRITATION - Category 1A
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.