Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Ireland and United Kingdom: Northern Ireland Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET

HARPIC Active Fresh Mountain Pine



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

1.1 Product identifier

Product name

SDS no.

: HARPIC Active Fresh Mountain Pine

: D0264586

ż

: FF0258542 / 3198281, 3084603, 3251592, 3232919

Formulation # Product type

Liquid.

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

Identified uses

Toilet cleaners (powder, liquid, gel, tablet) for consumer use

1.3 Details of the supplier of the safety data sheet

Supplier

The United Kingdom: RB UK Hygiene Home Commercial Ltd Wellcroft House Wellcroft Road Slough, Berkshire SL1 4AQ Tel: 0800 376 8181 Email: ConsumerCare_UK@reckitt.com

The Republic Of Ireland:

RB Ireland Hygiene Home Commercial Ltd 7 Riverwalk Citywest Business Campus Dublin 24 Ireland Tel: 01 661 7318 Email: ConsumerHealth IE@reckitt.com

1.4 Emergency telephone number

National advisory body/Poison Centre

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]

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.

SECTION 2: Hazards identification

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

2.2 Label elements

2.2 Laber cicilients		
Signal word	1	No signal word.
Hazard statements	1	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	1	Wash hands thoroughly after handling.
Response	1	Not applicable.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	INGREDIENT DECLARATION Per 100 g of product contains 0.29 g Benzalkonium chloride. Contains <5% non- ionic surfactants Disinfectant Perfume.
Special packaging requirem	en	<u>ts</u>
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Not applicable.
2.3 Other hazards		
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

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
SODIUM FORMATE	REACH #: 01-2119486468-21 EC: 205-488-0 CAS: 141-53-7	≤3	Acute Tox. 3, H331	ATE [Inhalation (dusts and mists)] = 0.67 mg/l	[1]
FORMIC ACID	REACH #: 01-2119491174-37 EC: 200-579-1 CAS: 64-18-6 Index: 607-001-00-0	<1	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Corr. 1A, H314 Eye Dam. 1, H318	ATE [Oral] = 730 mg/kg ATE [Inhalation (vapours)] = 7.4 mg/l Skin Corr. 1A, H314: $C \ge 90\%$ Skin Corr. 1B, H314: 10% $\le C <$ 90% Skin Irrit. 2, H315:	[1] [2]

SECTION 3: Composition/information on ingredients

				2% ≤ C < 10% Eye Dam. 1, H318: C ≥ 10% Eye Irrit. 2, H319: 2% ≤ C < 10%	
Alcohols, C12-16, ethoxylated	EC: 500-221-7 CAS: 68551-12-2	≤0.3	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg M [Acute] = 1	[1]
BENZALKONIUM CHLORIDE	REACH #: 01-2119983287-23 EC: 270-325-2 CAS: 68424-85-1	≤0.3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 344 mg/kg M [Acute] = 10 M [Chronic] = 1	[1]
			See Section 16 for the full text of the H statements declared above.		

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 m	easures
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.

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

U		<u> </u>
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 fi	ron	n 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 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: Acciden	ta	I release measures
6.4 Deresal pressutions pr	-	ative aquipment and amorganou procedures

6.1 Personal precautions, protective equipment and emergency procedures

Date of issue/Date of revision		: 10/03/2023 Date of previous issue : No previous validation Version : 1 4/14
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.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach the 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 spilt product.
6.3 Methods and material for Small spill		ntainment and cleaning up 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. Dispose of via a licensed waste disposal contractor.
6.2 Environmental precautions	:	Avoid dispersal of spilt 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.
For emergency responders	:	If specialised 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".
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 spilt material. Put on appropriate personal protective equipment.

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 ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. 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.
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. 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 unlabelled 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 cleaners (powder, liquid, gel, tablet) for consumer use

Industrial sector specific solutions

SECTION 8: Exposure controls/personal protection

: Not available.

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
FORMIC ACID	NAOSH (Ireland, 5/2021). Notes: EU derived Occupational Exposure Limit Values OELV-8hr: 5 ppm 8 hours. OELV-8hr: 9 mg/m ³ 8 hours.
procedures European S assessmen values and atmosphere of exposure (Workplace for the mea	should be made to monitoring standards, such as the following: Standard EN 689 (Workplace atmospheres - Guidance for the t of exposure by inhalation to chemical agents for comparison with limit measurement strategy) European Standard EN 14042 (Workplace es - Guide for the application and use of procedures for the assessment to chemical and biological agents) European Standard EN 482 atmospheres - General requirements for the performance of procedures surement of chemical agents) Reference to national guidance for methods for the determination of hazardous substances will also be
DNELs/DMELs	

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
		-		-	
DIUM FORMATE	DNEL	Long term Oral			Systemic
			-		
	DNEL	Long term Dermal			Systemic
	DUE				
	DNEL		8.7 mg/m ³		Systemic
			10 mg/kg		Sustamia
		-	bw/day		Systemic
	DNEL		35.26 mg/ m³	Workers	Systemic
RMIC ACID	DNEL	Long term		General	Local
		Inhalation	Ŭ	population	
	DNEL	Long term	9.5 mg/m ³	Workers	Local
		Inhalation	_		
NZALKONIUM CHLORIDE	DNEL	Long term	1.64 mg/m ³		Systemic
		Inhalation			
				• •	
	DNEL	Long term Oral			Systemic
			bw/day		
	DNEL	Long term Dermal	•••		Systemic
			bw/day		
		1	1.0.1		
	DNEL		1.64 mg/m ³		Systemic
					Curata main
	DINEL	Long term Oral			Systemic
		Long torm Dormal	-		Svetomie
	DINEL				Systemic
		l ong term			Systemic
			0.00 mg/m		Cysterne
	DNEL	Long term Dermal	5.7 mg/kg	Workers	Systemic
	DIUM FORMATE RMIC ACID NZALKONIUM CHLORIDE	DIUM FORMATE DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	DIUM FORMATE DNEL Long term Oral DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term Oral DNEL Long term Oral DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Oral DNEL Long term Oral	DIUM FORMATEDNELLong term Oral5 mg/kg bw/dayDNELLong term Dermal5 mg/kg bw/dayDNELLong term Dermal5 mg/kg bw/dayDNELLong term Dermal10 mg/kg bw/dayDNELLong term Dermal35.26 mg/ m³ InhalationDNELLong term3 mg/m³ InhalationDNELLong term9.5 mg/m³ InhalationNZALKONIUM CHLORIDEDNELLong term OralDNELLong term Oral3.4 mg/kg bw/dayDNELLong term Dermal3.4 mg/kg bw/dayDNELLong term Dermal3.96 mg/m³	DIUM FORMATEDNELLong term Oral5 mg/kg bw/dayGeneral populationDNELLong term Dermal5 mg/kg bw/dayGeneral populationDNELLong term8.7 mg/m3General populationDNELLong term Dermal10 mg/kg bw/dayWorkersDNELLong term Dermal10 mg/kg bw/dayWorkersDNELLong term Inhalation3 mg/m3General populationDNELLong term Inhalation3 mg/m3General populationNZALKONIUM CHLORIDEDNELLong term Inhalation1.64 mg/m3General populationNZALKONIUM CHLORIDEDNELLong term Inhalation3.4 mg/kg bw/dayGeneral populationDNELLong term Inhalation3.4 mg/kg bw/dayGeneral populationDNELLong term Dermal3.4 mg/kg bw/dayGeneral populationDNELLong term Dermal3.4 mg/kg bw/dayGeneral populationDNELLong term Oral3.4 mg/kg bw/dayGeneral populationDNELLong term Oral3.4 mg/kg bw/dayGeneral populationDNELLong term Oral3.4 mg/kg bw/dayGeneral populationDNELLong term Dermal3.4 mg/kg bw/dayGeneral populationDNELLong term Dermal3.4 mg/kg bw/dayGeneral populationDNELLong term Dermal3.4 mg/kg bw/dayGeneral populationDNELLong term Dermal3.6 mg/m3General population </td

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
BENZALKONIUM CHLORIDE	Fresh water	0.001 mg/l	-
	Marine water	0.001 mg/l	-
	Sewage Treatment	0.4 mg/l	-
	Plant		
	Fresh water sediment	12.27 mg/kg dwt	-
	Marine water sediment	13.09 mg/kg dwt	-

8.2 Exposure controls

Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection meas	<u>ires</u>
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: safety glasses with side-shields.
Skin protection	
Date of issue/Date of revision	: 10/03/2023 Date of previous issue : No previous validation Version : 1 6/1

SECTION 8: Exposure controls/personal 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)
	ÈN 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

<u>Appearance</u>	
Physical state	: Liquid. [Clear viscous liquid.]
Colour	: Green.
Odour	: Not available.
Melting point/freezing point	: Not relevant/applicable due to nature of the product.
Initial boiling point and boiling range	: Not relevant/applicable due to nature of the product.
Flammability (solid, gas)	: Not relevant/applicable due to nature of the product.
Upper/lower flammability or explosive limits	: Not relevant/applicable due to nature of the product.
Flash point	: Closed cup: >93.3°C (>199.9°F)
Auto-ignition temperature	: Not relevant/applicable due to nature of the product.
Decomposition temperature	: Not relevant/applicable due to nature of the product.
рН	: 3.7 to 4.1 [Conc. (% w/w): 100%]
Viscosity	: Dynamic: 150 to 400 mPa·s

Date of issue/Date of revision

SECTION 9: Physical and chemical properties

Solubility(ies)

Solubility(ies)	1	
Media		Result
cold water		Easily soluble
hot water		Easily soluble
Miscible with water	:	Yes.
Partition coefficient: n-octanol/ water	:	Not relevant/applicable due to nature of the product.
Vapour pressure	:	Not relevant/applicable due to nature of the product.
Relative density	:	1.007 to 1.016
Density	1	1.007 to 1.016 g/cm³ [20°C (68°F)]
Vapour density	:	Not relevant/applicable due to nature of the product.
Particle characteristics		
Median particle size	÷	Not relevant/applicable due to nature of the product.

SECTION 10: Stabilit	SECTION 10: Stability and reactivity					
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredier	nts.				
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	: No specific data.					
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		
SODIUM FORMATE	LC50 Inhalation Dusts and mists	Rat	670 mg/m³	4 hours		
FORMIC ACID	LC50 Inhalation Vapour	Rat	7400 mg/m³	4 hours		
	LD50 Oral	Rat	730 mg/kg	-		
Alcohols, C12-16, ethoxylated	LD50 Oral	Rat	500 to 2000 mg/ kg	-		
BENZALKONIUM CHLORIDE	LD50 Dermal	Rabbit	2848 mg/kg	-		
	LD50 Dermal	Rabbit	3413 mg/kg	-		
	LD50 Oral	Rat	344 mg/kg	-		
	LD50 Oral	Rat	398 mg/kg	-		
Conclusion/Summary	ion/Summary : Based on available data, the classification criteria are not met.					

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Harpic Active Cleaning Gel (Pine)_FF0258542	N/A	N/A	N/A	1226.8	44.8
(D0264586) EU					
SODIUM FORMATE	N/A	N/A	N/A	N/A	0.67
FORMIC ACID	730	N/A	N/A	7.4	N/A
Alcohols, C12-16, ethoxylated	500	N/A	N/A	N/A	N/A
BENZALKONIUM CHLORIDE	344	2848	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
FORMIC ACID	Eyes - Severe irritant	Rabbit	-	122 mg	-
	Skin - Mild irritant	Rabbit	-	610 mg	-
Alcohols, C12-16,	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
ethoxylated				uL	
BENZALKONIUM CHLORIDE	Skin - Severe irritant	Rabbit	-	25 mg	-

Conclusion/Summary

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

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

Skin

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

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
BENZALKONIUM CHLORIDE	skin	Guinea pig	Not sensitizing

Conclusion/Summary

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

Respiratory

Skin

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

Mutagenicity

Product/ingredient name	Test	Experiment	Result
BENZALKONIUM	OECD 471 Bacterial	Experiment: In vitro	Negative
CHLORIDE	Reverse Mutation Test	Subject: Bacteria	Negativa
	OECD 473 In vitro Mammalian Chromosomal	Experiment: In vitro Subject: Mammalian-Animal	Negative
	Aberration Test OECD 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
Conclusion/Summary	: Based on available dat	ta, the classification criteria are not m	et.
Carcinogenicity			
Conclusion/Summary	: Based on available dat	ta, the classification criteria are not m	et.
Reproductive toxicity			
Conclusion/Summary	: Based on available dat	ta, the classification criteria are not m	et.
<u>Teratogenicity</u>			

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

Specific target organ toxicity (single exposure)

SECTION 11: Toxico	logical i	nformatio	n		
Product/ingredient name BENZALKONIUM CHLORIDE		ne	Category	Route of exposure	Target organs
		Category 3	-	Respiratory tract irritation	
Specific target organ toxici	ty (repeate	<u>d exposure)</u>			
Not available.					
Aspiration hazard Not available.					
nformation on likely routes of exposure	: Not ava	ailable.			
Potential acute health effect	<u>s</u>				
Eye contact	: No kno	wn significant e	ffects or critical haza	rds.	
Inhalation	: No kno	wn significant e	ffects or critical haza	rds.	
Skin contact		-	ffects or critical haza		
Ingestion	: No kno	wn significant e	ffects or critical haza	rds.	
Symptoms related to the phy	ysical, cher	nical and toxic	ological characteris	<u>stics</u>	
Eye contact	: No spe	cific data.			
Inhalation	: No spe	cific data.			
Skin contact	: No spe	cific data.			
Ingestion	: No spe	cific data.			
Delayed and immediate effe	cts as well	as chronic effe	ects from short and	long-term exposu	<u>ire</u>
Short term exposure					
Potential immediate effects	: Not ava	ailable.			
Potential delayed effects	: Not ava	ailable.			
Long term exposure					
Potential immediate effects	: Not ava	ailable.			
Potential delayed effects	: Not ava	ailable.			
Potential chronic health eff	ects				
Not available.					
Conclusion/Summary	: Based	on available dat	ta, the classification o	riteria are not met.	
General			ffects or critical haza		
Carcinogenicity		-	ffects or critical haza		
Mutagenicity		•	ffects or critical haza		
Reproductive toxicity		•	ffects or critical haza		
11.2 Information on other ha	zarde				
11.2.1 Endocrine disrupting					
Not available.	h obei nes	•			
11.2.2 Other information					

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
SODIUM FORMATE	Acute LC50 1400 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 2300 mg/l Fresh water	Fish - Pimephales promelas	96 hours
FORMIC ACID	Acute EC50 151200 µg/l Fresh water	Daphnia - Daphnia magna - Larvae	48 hours
	Acute LC50 80000 to 90000 μg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
BENZALKONIUM CHLORIDE	Acute EC50 0.016 mg/l	Daphnia	48 hours
	Acute LC50 64 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic EC10 0.009 mg/l	Algae	72 hours

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

12.2 Persistence and degradability

Conclusion/Summary : 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.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
BENZALKONIUM CHLORIDE	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
SODIUM FORMATE	-2.3	-	low
FORMIC ACID	-2.3	-	low

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: 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.

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 minimised 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	: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

European waste catalogue (EWC)

Waste designation	
detergents containing hazardous substances	
: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.	
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 spilt 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	ΙΑΤΑ
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

user

14.6 Special precautions for : **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 : Not available. bulk according to IMO instruments

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 authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : None. on the manufacture. placing on the market and use of certain dangerous substances, mixtures and articles

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**
- : No Chemical Safety Assessment has been carried out.

assessment

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
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

SECTION 16: Other information

Full text of classifications	[CLP/GHS]	
Acute Tox. 3 Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 3 Eye Dam. 1 Flam. Liq. 3 Skin Corr. 1A Skin Corr. 1B STOT SE 3	ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 1A SKIN CORROSION/IRRITATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3	
Date of printing	: 10/03/2023	
Date of issue/ Date of revision	: 10/03/2023	
Date of previous issue	: No previous validation	
Version	: 1	

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.