

PRODUCT SAFETY DATA SHEET



HEALTH • HYGIENE • HOME

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

1.1 Product identifier

DETTOL Power & Pure Advance Kitchen Oxygen Splash
Contains Hydrogen Peroxide and Benzalkonium Chloride

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

Surface disinfectant

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: 0333 2005 345

RB ROI Contact Telephone: 01 661 7318

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

RB email: consumer.relations-ukroi@rb.com



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

Revision Date:

25 April 2018

Revision:

4

Replacing:

2557356703 01 Jun 2017

RB Ref No:

2557356704

Revisions: Updated data sheet, multiple changes

Additional useful information

Product Format: Colourless liquid in bottle with trigger

Proper Shipping Name: Corrosive Liquid, n.o.s. (Citric acid, Hydrogen peroxide)

UN Transport Code: UN: 1760 **Class & Packing Group:** 8 III

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

Eye Irrit. 2, H319

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 : Warning

Hazard statements : May be corrosive to metals.
Causes serious eye irritation.

Precautionary statements

General : Keep out of reach of children.

Prevention : Not applicable.

Response : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage : Not applicable.

Disposal : Not applicable.

Hazardous ingredients : Not applicable.

Supplemental label elements : **Ingredient Declaration:**
Per 100 g of product contains 1.05 g Hydrogen Peroxide and 0.125 g Benzalkonium Chloride
< 5% Oxygen-based bleaching agent
< 5% Anionic surfactants
< 5% Non-ionic surfactant
Disinfectant
Perfume
Contains Linalool

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

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

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

SECTION 2: Hazards identification

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Alcohols, C9-11, ethoxylated	REACH #: 01-2119980051-45 CAS: 68439-46-3	≤2.5	Eye Irrit. 2, H319	[1]
hydrogen peroxide solution	REACH #: 01-2119485845-22 EC: 231-765-0 CAS: 7722-84-1 Index: 008-003-00-9	≤1.3	Ox. Liq. 1, H271 Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412	[1]
Citric acid	REACH #: 01-2119457026-42 EC: 201-069-1 CAS: 77-92-9	≤3	Eye Irrit. 2, H319	[1]
Quaternary ammonium compounds, benzyl-12-16-alkyldimethyl, chlorides	REACH #: 01-2119983287-23 EC: 270-325-2 CAS: 68424-85-1	<0.25	Acute Tox. 4, H302 Acute Tox. 4, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) 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** : 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. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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.

SECTION 4: First aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Get medical attention if adverse health effects persist or are severe. 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- 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

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, hazardous decomposition products may be produced.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

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.

SECTION 5: Firefighting measures

- 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- 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".

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).

6.3 Methods and material 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 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 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 ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. 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.
- 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.

SECTION 7: Handling and storage

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 corrosive resistant container with a resistant inner liner. 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.

7.3 Specific end use(s)

Recommendations : Surface Cleaner.
Consumer 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
hydrogen peroxide solution	Rozporządzenie Ministra Pracy i Polityki Społecznej (Poland, 8/2010). TWA: 1.5 mg/m ³ 8 hour(s). STEL: 4 mg/m ³ 15 minute(s).

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

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
hydrogen peroxide solution	DNEL	Long term Inhalation	1.4 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	3 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	0.21 mg/m ³	Consumers	Local
	DNEL	Short term Inhalation	1.93 mg/m ³	Consumers	Local

PNECs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail	Value	Method Detail
Hydrogen peroxide solution	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
Citric acid	Fresh water sediment	0.047 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.047 mg/kg dwt	Equilibrium Partitioning
	Fresh water	440 mg/l	-
	Fresh water sediment	34.6 mg/kg	-
	Marine water sediment	3.46 mg/kg	-
	Soil	33.1 mg/kg	-

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.

Skin protection

Hand protection : Use chemical resistant gloves classified under Standard EN374 - Protective gloves against chemicals and micro-organisms.

Examples of preferred glove barrier materials include: Nitrile/butadiene rubber ("nitrile" or "NBR"); Chlorinated polyethylene; Butyl rubber; Polyethylene.

Examples of acceptable glove barrier materials include: Natural rubber ("latex"); Neoprene; Viton; Ethyl vinyl alcohol laminate ("EVAL").

A glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended.

Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier. Considering the parameters specified by the glove manufacturer, checks during use should be carried out to ensure the gloves are still retaining their protective properties.

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.

SECTION 8: Exposure controls/personal protection

- 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

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid. [Clear.]
- Colour** : Not available.
- Odour** : Not available.
- Odour threshold** : Not available.
- pH** : 2.2 to 3.2 [Conc. (% w/w): 100%] [20 to 25°C]
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Closed cup: >93.3°C
- 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.
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Density** : 1 to 1.01 g/cm³ [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** : Not available.
- Explosive properties** : Not available.
- Oxidising properties** : Not available.
- Corrosivity Remarks** : Corrosive to metal

9.2 Other information

- Solubility in water** : See section 9.1 Solubility(ies)

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 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** : Do not mix with household chemicals
Corrosive to metal
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Instability Conditions** : Not available.
- Instability temperature** : Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Alcohols, C9-11, ethoxylated hydrogen peroxide	LD50 Oral	Rat	1378 mg/kg	-
	LD50 Oral	Rat - Male, Female	805 mg/kg (70% H2O2 w/w)	-
citric acid	LD50 Oral	Rat	3 g/kg	-
	LD50 Dermal	Rabbit	2848 mg/kg	-
	LD50 Dermal	Rabbit	3413 mg/kg	-
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	LD50 Oral	Rat	344 mg/kg	-
	LD50 Oral	Rat	398 mg/kg	-
	LD50 Oral	Rat	398 mg/kg	-

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

Acute toxicity estimates

Route	ATE value
Oral	36288.1 mg/kg
Inhalation (vapours)	1047.6 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hydrogen peroxide	Eyes - Severe irritant	Rabbit	-	1 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
citric acid	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Severe irritant	Rabbit	-	25 milligrams	-
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Severe irritant	Rabbit	-	25 milligrams	-

SECTION 11: Toxicological information

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

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

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

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	skin	Guinea pig	Not sensitizing

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

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

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	OECD 471 - Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 473 - Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 476 - Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative

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
hydrogen peroxide	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 irritation.

Inhalation : No known significant effects or critical hazards.

SECTION 11: Toxicological information

- Skin contact** : No known significant effects or critical hazards.
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 or irritation
 watering
 redness
- Inhalation** : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects as well as 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.
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
Alcohols, C9-11, ethoxylated	Acute EC50 5.36 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 2686 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
hydrogen peroxide	Acute LC50 8500 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 1.2 mg/l Marine water	Algae - Dunaliella tertiolecta - Exponential growth phase	72 hours
	Acute EC50 5.38 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 2320 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
citric acid	Acute LC50 93 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 989.7 ppm Fresh water	Fish - Oncorhynchus tshawytscha - Egg	43 days
	Acute LC50 160000 µg/l Marine water	Crustaceans - Carcinus	48 hours

SECTION 12: Ecological information

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Acute EC50 0.016 mg/l	maenas - Adult Daphnia	48 hours
	Acute LC50 64 ppb Fresh water Chronic EC10 0.009 mg/l	Fish - Oncorhynchus mykiss Algae	96 hours 72 hours

12.2 Persistence and degradability

No known effect according to our database.

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
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
hydrogen peroxide	-1.36	-	low
citric acid	-1.8	-	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

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 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 : Yes.

SECTION 13: Disposal considerations

European waste catalogue (EWC)

Waste code	Waste designation
20 01 29*	detergents containing hazardous substances





Packaging

Methods of disposal : 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.

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 spill 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	UN1760	UN1760	UN1760	UN1760
14.2 UN proper shipping name	CORROSIVE LIQUID, N.O.S. (citric acid, hydrogen peroxide)	CORROSIVE LIQUID, N.O.S. (citric acid, hydrogen peroxide)	CORROSIVE LIQUID, N.O.S. (citric acid, hydrogen peroxide)	Corrosive liquid, n.o.s. (citric acid, hydrogen peroxide)
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	<u>Hazard identification number</u> 80 <u>Limited quantity</u> 5 L <u>Special provisions</u> 274 <u>Tunnel code</u> (E)	<u>Special provisions</u> 274	<u>Limited quantity</u> <u>Emergency schedules (EmS)</u> F-A, S-B	<u>See DG-List.</u>

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 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

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 not controlled under the Seveso Directive.

Hazard class for water : 1 Appendix No. 4

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]

Classification	Justification
Met. Corr. 1, H290 Eye Irrit. 2, H319	On basis of test data Calculation method

Full text of abbreviated H statements

H271	May cause fire or explosion; strong oxidiser.
H302 (oral)	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332 (inhalation)	Harmful if inhaled.
H335 (Respiratory tract irritation)	May cause respiratory irritation. (Respiratory tract irritation)

Full text of classifications [CLP/GHS]

SECTION 16: Other information

Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Aquatic Chronic 3, H412 Eye Dam. 1, H318 Eye Irrit. 2, H319 Met. Corr. 1, H290 Ox. Liq. 1, H271 Skin Corr. 1A, H314 Skin Corr. 1B, H314 STOT SE 3, H335	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 ACUTE AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 1 LONG-TERM AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 CORROSIVE TO METALS - Category 1 OXIDISING LIQUIDS - Category 1 SKIN CORROSION/IRRITATION - Category 1A SKIN CORROSION/IRRITATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
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This document complements the technical usage instructions but does not replace them. The information contained herein is based on our best current knowledge of the product concerned, and is given in good faith. The attention of recipients is drawn to (amongst other things) the element of risk consequent to use of the product other than that for which it was intended.

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.

This Document may be entitled Product Safety Data Sheet as required by REACH (Registration, Evaluation, Authorisation and restriction of Chemicals) Annex II OR Product Data Information Sheet where a product is not required to be supported by a full REACH compliant SDS (e.g. not classified as hazardous or out of scope, such as cosmetics). Changes from the previous version are given in Section 1.

This list of information must not be considered as exhaustive, and does not exonerate the recipient from taking other precautions described in documents other than those mentioned, concerning the storage and use of the product, for which they remain the sole person responsible.