SAFETY DATA SHEET

Harpic Hygienic Bleach

HEALTH · HYGIENE · HOME

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

1.1 Product identifier

Product name : Harpic Hygienic Bleach

SDS # : D0245597 v1.2

Formulation # : ST 395/2012 (8039279 v1.0)

UPC Code / Sizes : Blister sealed with foil containing 40g, 26g (2x40g, 2x26g blocks)

Product type : Toilet bowl cleaner

Product use : Consumer

Supplier : AUSTRALIA
Reckitt Benckiser (Australia) Pty Limited
ABN: 17 003 274 655
680 George Street, Sydney NSW 2000
Tel: +61 (0)2 9857 2000

NEW ZEALAND
Reckitt Benckiser (New Zealand) Limited
2 Fred Thomas Drive, Takapuna,
Auckland, New Zealand 0622
Tel: +64 9 484 1400

Poison Information contact: : Australia - 13 11 26
New Zealand - 0800 764 766 or 0800 POISON

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]

Skin Irrit. 2, H315
Eye Dam. 1, H318
Aquatic Chronic 3, H412

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R41, R38
R52/53

Human health hazards : Risk of serious damage to eyes. Irritating to skin.

SECTION 2: Hazards identification

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or 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 : Causes serious eye damage.
Causes skin irritation.
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 : Wear protective gloves and eye/face protection. Wash hands thoroughly after handling.

Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention/advice.

Storage : Not applicable.

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

Hazard symbol or symbols :

Indication of danger : Irritant

Risk phrases : R41- Risk of serious damage to eyes.
R38- Irritating to skin.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S2- Keep out of the reach of children.
S24/25- Avoid contact with skin and eyes.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28- After contact with skin, wash immediately with plenty of water.
S39- Wear eye/face protection.
S46- If swallowed, seek medical advice immediately and show this container or label.
S50- Do not mix with acids or Other Cleaning Products.

Hazardous ingredients (DPD) : Sodium 2-dodecylbenzenesulfonate
Sodium C14-16 olefin sulfonate

Hazardous ingredients (CLP) : Sodium dodecylbenzenesulfonate
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts

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

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

Special packaging requirements

SECTION 2: Hazards identification

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.

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

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

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification 67/548/EEC	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	EC: 270-407-8 CAS: 68439-57-6	15 - 30	Xi; R41, R38	Skin Irrit. 2, H315 Eye Dam. 1, H318	[1]
sodium dodecylbenzenesulfonate	EC: 246-680-4 CAS: 25155-30-0	15 - 30	Xn; R22 Xi; R41, R38	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318	[1]
troclosene sodium, dihydrate	EC: 220-767-7 CAS: 51580-86-0 Index: 613-030-00-X	< 2.5	Xn; R22 Xi; R36/37 N; R50/53	Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT SE 3, H335 (Respiratory tract irritation) Aquatic Chronic 1, H410	[1]
2-tert-butylcyclohexyl acetate	EC: 201-828-7 CAS: 88-41-5	< 2.5	N; R51/53	Aquatic Chronic 2, H411	[1]
tetrasodium (1-hydroxyethylidene) bisphosphonate	EC: 223-267-7 CAS: 3794-83-0	< 2.5	Xn; R22 Xi; R36	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
sodium carbonate	REACH #: 01-2119485498-19 EC: 207-838-8 CAS: 497-19-8 Index: 011-005-00-2	< 2.5	Xi; R36	Eye Irrit. 2, H319	[1]
Silica gel, pptd., cryst.-free	CAS: 112926-00-8	< 2.5	Not classified	Not classified	[2]
			See Section 16 for the full text of the R-phrases declared above.	**See Section 16 for the full text of the H statements declared above.**	

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.

SECTION 3: Composition/information on ingredients

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

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 or vPvBs 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 : Immedeiately 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 : 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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.

Ingestion : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Move to fresh air. 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.

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

Potential acute health effects

Eye contact : Severely irritating to eyes.

SECTION 4: First aid measures

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : None

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 thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

SECTION 6: Accidental release measures

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). 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 : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

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 ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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

Storage : 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 locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations : Toilet bowl cleaner
Consumer uses: Private households (= general public = consumers)

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

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).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name Europe	Exposure limit values
Silica gel, pptd., cryst.-free	**SUVA (Switzerland, 1/2013).** TWA: 4 mg/m³ 8 hours. Form: Inhalable dust (total dust) **Safe Work Australia (Australia, 7/2012).** TWA: 10 mg/m³ 8 hours. Form: Inspirable fraction **CA British Columbia Provincial (Canada, 4/2012).** TWA: 1.5 mg/m³ 8 hours. Form: Respirable TWA: 4 mg/m³ 8 hours. **CA Quebec Provincial (Canada, 12/2012).** TWAEV: 6 mg/m³ 8 hours. Form: Respirable dust. **OSHA PEL 1989 (United States, 3/1989).** TWA: 6 mg/m³ 8 hours. **Ministry of Labor (Republic of Korea, 3/2012).** TWA: 10 mg/m³ 8 hours. **Ministry of Health (Chile, 11/2003).** TWA: 8 mg/m³ 8 hours. **NOM-010-STPS (Mexico, 9/2000).** LMPE-PPT: 10 mg/m³ 8 hours. **GBZ-2 (China, 4/2007).** PC-TWA: 5 mg/m³ 8 hours. Form: dust **MZCR PEL/NPK-P (Czech Republic, 2/2012).** TWA: 4 mg/m³ 8 hours. Form: dust **Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 12/2011).** TWA: 5 mg/m³ 8 hours. **DOSH USECHH (Malaysia, 4/2000).** TWA: 10 mg/m³ 8 hours. Form: gel TWA: 10 mg/m³ 8 hours. **Factories Order (PEL) (Singapore, 2/2006).** PEL (long term): 10 mg/m³ 8 hours. **Lijst Grenswaarden / Valeurs Limites (Belgium, 11/2011).** TWA: 10 mg/m³ 8 hours. **NAOSH (Ireland, 5/2010).** OELV-8hr: 6 mg/m³ 8 hours. Form: inhalable dust OELV-8hr: 2.4 mg/m³ 8 hours. Form: respirable dust **EH40/2005 WELs (United Kingdom (UK), 12/2011).** TWA: 6 mg/m³ 8 hours. Form: inhalable dust TWA: 2.4 mg/m³ 8 hours. Form: respirable dust **GKV_MAK (Austria, 12/2011).** TWA: 4 mg/m³ 8 hours. Form: inhalable fraction **MAK-Werte Liste (Germany, 7/2012).** TWA: 4 mg/m³ 8 hours. Form: inhalable fraction TWA: 0.3 mg/m³ 8 hours. Form: respirable fraction **MinSZW Wettelijke Grenswaarden (Netherlands, 6/2011).** OEL, 8-h TWA: 0.075 mg/m³ 8 hours. Form: respirable dust **Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz. U. 2002 Nr 217, poz. 1833, z pózn. zm.) (Poland, 12/2011).** TWA: 2 mg/m³ 8 hours. Form: respirable dust TWA: 10 mg/m³ 8 hours. Form: total dust **Ministry of Interior (Thailand, 7/1977).** TWA: 20 mppel 8 hours. TWA: 80 MG/M3 / %SiO2 8 hours. **Departemen Tenaga Kerja (Indonesia, 2/2005).** TWA: 10 mg/m³ 8 hours.

SECTION 8: Exposure controls/personal protection

	CA Ontario Provincial (Canada, 1/2013). TWA: 10 mg/m³ 8 hours. **NIOSH REL (United States, 1/2013).** TWA: 6 mg/m³ 10 hours.

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

8.2 Manufacturer: Exposure controls

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

Individual protection measures

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

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

Skin protection

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

Permeation level 6, Penetration level 3 following EN374, taking into consideration the exposure of chemicals given in chapter 3.

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 : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 8: Exposure controls/personal protection

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	Solid. [Block]
Color	:	White.
Odor	:	bleach
Odor threshold	:	Not available.
pH	:	Not available.
Melting point/freezing point	:	Not available.
Initial boiling point and boiling range	:	Not available.
Flash point	:	Non-flammable.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Upper/lower flammability or explosive limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Density	:	Not available.
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.
Oxidizing properties	:	Not available.
tablet Weight or volume	:	26 gm & 40 gm
Corrosivity Remarks	:	Not available.

9.2 Other information

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 : Hazardous reactions or instability may occur under certain conditions of storage or use.

Warning Do not mix with household chemicals

SECTION 10: Stability and reactivity

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : Do not mix with household chemicals

10.6 Hazardous decomposition products : Hazardous decomposition products : carbon oxides , Various Organic chemicals.

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
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LD50 Oral	Rat	2310 mg/kg	-
sodium dodecylbenzenesulfonate	LD50 Oral	Rat	438 mg/kg	-

Acute toxicity estimates

Route	ATE value
Oral	2175.9 mg/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sodium dodecylbenzenesulfonate	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-

Sensitization

No known effect according to our database.

Mutagenicity

No known effect according to our database.

Carcinogenicity

No known effect according to our database.

Reproductive toxicity

No known effect according to our database.

Teratogenicity

No known effect according to our database.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
troclosene sodium, dihydrate	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

No known effect according to our database.

Aspiration hazard

SECTION 11: Toxicological information

No known effect according to our database.

Potential acute health effects

Eye contact : Severely irritating to eyes.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

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 : Not available.

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
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Acute EC50 4.53 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
sodium dodecylbenzenesulfonate	Acute EC50 29000 ug/L Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	96 hours
	Acute EC50 7.81 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	Acute EC50 5.88 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 112.4 mg/L	Algae - Pseudokirchneriella subcapitata - Exponential	72 hours

SECTION 12: Ecological information

	Acute LC50 1.18 ppm Fresh water	growth phase Fish - Lepomis macrochirus	96 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
sodium carbonate	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
sodium dodecylbenzenesulfonate	1.96	-	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 : Waste must be disposed of in accordance with federal, state and local environmental control regulations. Waste packaging should be recycled.

Hazardous waste : Yes.

European waste catalogue (EWC)

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

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. 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

This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

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

SECTION 15: Regulatory information

Chemical Safety Assessment following regulation 1907/2006/EC: Not relevant.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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

Integrated pollution prevention and control list (IPPC) - Air : Listed

Integrated pollution prevention and control list (IPPC) - Water : Not listed

CMR Substances

None of the components are listed.

Storage code : 13

Storage code Reference: : TRGS 510 - Storage of hazardous substances in nonstationary containers

Hazard class for water : 2 Appendix No. 4

WGK: Notes : - for bulk material, not applicable for product in domestic pack sizes. Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes (VwVwS)

AUSTRALIA and NEW ZEALAND

Standard for the Uniform Scheduling of Medicines and Poisons

Poison schedule (Australia) : Not scheduled

Australia inventory (AICS) : All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.

HSNO Group Standard : Cleaning products (Subsidiary hazard)

HSNO Approval Number : HSR002530

Approved Handler Requirement : No.

Tracking Requirement : No.

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]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Key literature references and sources for data : Not available.

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

Skin Irrit. 2, H315
Eye Dam. 1, H318
Aquatic Chronic 3, H412

SECTION 16: Other information

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

Classification	Justification
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Aquatic Chronic 3, H412	Calculation method

Europe

Full text of abbreviated H statements :

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation. (Respiratory tract irritation)
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.

Full text of classifications [CLP/GHS] :

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Aquatic Chronic 1, H410	AQUATIC HAZARD (LONG-TERM) - Category 1
Aquatic Chronic 2, H411	AQUATIC HAZARD (LONG-TERM) - Category 2
Aquatic Chronic 3, H412	AQUATIC HAZARD (LONG-TERM) - Category 3
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

Full text of abbreviated R phrases :

R22- Harmful if swallowed.
R41- Risk of serious damage to eyes.
R36- Irritating to eyes.
R38- Irritating to skin.
R36/37- Irritating to eyes and respiratory system.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] :

Xn - Harmful
Xi - Irritant
N - Dangerous for the environment

Date of issue/ Date of revision : 01/08/2014.

Date of previous issue : No previous validation

Version : 1.2

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