

PRODUCT SAFETY DATA SHEET



HEALTH • HYGIENE • HOME

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

1.1 Product identifier

FINISH Quantum Max Power & Pure Regular

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

Detergent for use in domestic automatic dishwashers

1.3. Details of the Supplier of the Safety Data Sheet

The United Kingdom:

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

The Republic Of Ireland:

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

1.4 Emergency telephone number

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

UK Contact Telephone: 0845 769 7079

ROI Contact Telephone: 01 661 7318

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

Revision Date:

1 January 2017

Revision

3

Replacing

3557222602 01 Sep 2016

RB Ref No:


3557222603

Revisions: Formula change

Additional useful information

Product Format: White powder with red gel pill separated from a coloured gel inside a divided clear soluble box, approx. 18g

Product Identification Code

 03635-01049-GHS07

Proper Shipping Name

Not Classified Dangerous for Transport
Store between 5°C and 30°C

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]

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 : Causes serious eye irritation.

Precautionary statements

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

Prevention : Wear eye or 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.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains Subtilisin. May produce an allergic reaction.

INGREDIENT DECLARATION:

5 - 15% oxygen-based bleaching agents

5 - 15% non-ionic surfactants

< 5% polycarboxylates

< 5 % phosphonates

Contains enzymes (Subtilisin, Amylase)

Contains perfumes

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

Special packaging requirements

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

Tactile warning of danger : Not applicable.

2.3 Other hazards

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type |
|---|---|------|--|------|
| disodium carbonate, compound with hydrogen peroxide (2:3) | REACH #: 01-2119457268-30 EC: 239-707-6 CAS: 15630-89-4 | ≤14 | Ox. Sol. 3, H272 Acute Tox. 4, H302 Eye Dam. 1, H318 | [1] |
| Alcohols, C12-14, ethoxylated propoxylated sodium carbonate | CAS: 68439-51-0 REACH #: 01-2119485498-19 EC: 207-838-8 CAS: 497-19-8 Index: 011-005-00-2 | ≤8.9 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Eye Irrit. 2, H319 | [1] |
| (1-hydroxyethylidene) bisphosphonic acid, sodium salt | REACH #: 01-2119510382-52 EC: 249-559-4 CAS: 29329-71-3 | ≤5 | Acute Tox. 4, H302 Eye Irrit. 2, H319 | [1] |
| Silicic acid, sodium salt | REACH #: 01-2119448725-31 EC: 215-687-4 CAS: 1344-09-8 | ≤1 | Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 | [1] |
| Subtilisin | REACH #: 01-2119480434-38 EC: 232-752-2 CAS: 9014-01-1 Index: 647-012-00-8 | ≤0.3 | Skin Irrit. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 STOT SE 3, H335 Aquatic Chronic 2, H411 | [1] |
| Alcohols, C12-18, ethoxylated and propoxylated | REACH #: 02-2119548505-30 EC: 500-242-1 CAS: 69227-21-0 | ≤0.3 | Aquatic Acute 1, H400 (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. 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 | : 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 | : 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. |
| 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 : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
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.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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 ingest. Avoid contact with eyes, skin and clothing. 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 between the following temperatures: 5 to 30°C (41 to 86°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Seveso Directive - Reporting thresholds (in tonnes)

Named substances

| Name | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| Methanol | 500 | 5000 |

Do not store above the following temperature: : 40 °C

Recommended Storage Temperature for 3 weeks : <40 °C

Recommended Storage Temperature for up to 6 weeks : <30 °C

Recommended Storage Temperature for over 6 weeks : <30 °C

7.3 Specific end use(s)

- Recommendations** : Consumer uses Washing and cleaning products (including solvent based products)
- 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

No exposure limit value known.

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.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|------|-----------------------|-------------------------|------------|----------|
| disodium carbonate, compound with hydrogen peroxide (2:3) sodium carbonate | DNEL | Short term Dermal | 6.4 mg/cm ² | Consumers | - |
| | DNEL | Short term Dermal | 12.8 mg/cm ² | Workers | - |
| | DNEL | Short term Inhalation | 5 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 10 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 10 mg/m ³ | Consumers | Local |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|---|------------------------|------------|--------------------|
| disodium carbonate, compound with hydrogen peroxide (2:3) | Sewage Treatment Plant | 16.24 mg/l | Assessment Factors |
| | Fresh water | 0.035 mg/l | Assessment Factors |
| | Marine water | 0.035 mg/l | Assessment Factors |

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 | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| Body protection | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |
| 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. [Tablets] |
| Color | : White. Red. Blue. or Yellow. or Green. |
| Odor | : Characteristic. |
| Odor threshold | : Not available. |
| pH | : 10 [Conc. (% w/w): 10%] |
| 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 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) | : Soluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/ water | : Not applicable. |
| Decomposition temperature | : Not available. |
| Viscosity | : Not applicable. |
| Explosive properties | : Not available. |
| Oxidizing properties | : Not available. |
| tablet Weight or volume | : 15 - 20g |
| Corrosivity Remarks | : Not available. |

9.2 Other information

| | |
|---------------------|------------------|
| Solubility in water | : Not available. |
| SADT | : >55°C(50kg) |

No additional information.

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information.
- 10.3 Possibility of hazardous reactions** : Hazardous reactions or instability may occur under certain conditions of storage or use.
Risk of exothermic decomposition at elevated temperatures, contact with other substances (such as acids, heavy-metal compounds or amines), friction or shock.
- 10.4 Conditions to avoid** :  Moisture: Keep away from heat and direct sunlight.
- 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.
- Instability Conditions** :  Special shipping information For long distance transport Temperature control is required. at °C:30
- Instability temperature** : Not available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|-------------|---------|-------------|----------|
| disodium carbonate, compound with hydrogen peroxide (2:3) | LD50 Oral | Rat | 1034 mg/kg | - |
| sodium carbonate | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| (1-hydroxyethylidene) bisphosphonic acid, sodium salt | LD50 Oral | Rat | 2800 mg/kg | - |
| subtilisin | LD50 Oral | Rat | 1100 mg/kg | - |
| | LD50 Oral | Rat | 1800 mg/kg | - |

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

Acute toxicity estimates

| Route | ATE value |
|-------|------------|
| Oral | 6568 mg/kg |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---------------------------|--------------------------|---------|-------|-------------------------|-------------|
| sodium carbonate | Eyes - Mild irritant | Rabbit | - | 0.5 minutes | - |
| | Eyes - Moderate irritant | Rabbit | - | 100 milligrams | - |
| Silicic acid, sodium salt | Eyes - Severe irritant | Rabbit | - | 24 hours 100 milligrams | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 10 milligrams | - |
| subtilisin | Eyes - Moderate irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | | | | 3 milligrams | - |

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.

Sensitization

No known effect according to our database.

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

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

Mutagenicity

No known effect according to our database.

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

Carcinogenicity

No known effect according to our database.

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

Reproductive toxicity

No known effect according to our database.

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

Teratogenicity

No known effect according to our database.

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

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|---------------------------|------------|-------------------|------------------------------|
| Silicic acid, sodium salt | Category 3 | Not applicable. | Respiratory tract irritation |
| subtilisin | 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.
- 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 and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.
- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- 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 |
|---|--------------------------------------|--|-----------|
| disodium carbonate, compound with hydrogen peroxide (2:3) | Acute EC50 70 mg/l | Algae - Chlorella emersonii | 240 hours |
| sodium carbonate | Acute EC50 4.9 mg/l | Daphnia - Daphnia Pulex | 48 hours |
| | Acute IC50 68000 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| | Acute LC50 70.7 mg/l | Fish - Pimephales promelas | 96 hours |
| | Acute EC50 242000 µg/l Fresh water | Algae - Navicula seminulum | 96 hours |
| | Acute LC50 176000 µg/l Fresh water | Crustaceans - Amphipoda | 48 hours |
| | Acute LC50 265000 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| (1-hydroxyethylidene) bisphosphonic acid, sodium salt | Acute LC50 300000 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| Silicic acid, sodium salt | Acute EC50 >170 mg/l Fresh water | Daphnia - Daphnia magna | 96 hours |
| | Acute LC50 >100 mg/l Fresh water | Fish - Salmo gairdneri - Adult | 96 hours |
| subtilisin | Acute EC50 33.53 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute LC50 494000 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| Alcohols, C12-18, ethoxylated and propoxylated | Acute EC50 23.78 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute EC50 0.1 to 1 mg/l | Aquatic plants | 72 hours |
| | Acute EC50 0.1 to 1 mg/l Fresh water | Daphnia | 48 hours |
| | Acute LC50 0.1 to 1 mg/l Fresh water | Fish - Leuciscus idus | 96 hours |

12.2 Persistence and degradability

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

No known effect according to our database.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| sodium carbonate | - | - | Readily |
| Alcohols, C12-18, ethoxylated and propoxylated | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---|--------------------|-----|-----------|
| (1-hydroxyethylidene) bisphosphonic acid, sodium salt | -3.5 | 71 | low |
| subtilisin | -3.1 | - | 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 minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|--|
| 20 01 29* | detergents containing hazardous 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

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

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.
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 controlled under the Seveso Directive.

Named substances

| Name |
|----------|
| Methanol |

Storage code : 13

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

Hazard class for water : 2 Appendix No. 4

15.2 Chemical Safety Assessment : Complete.

SECTION 16: OTHER INFORMATION

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 |
|--------------------|--------------------|
| Eye Irrit. 2, H319 | Calculation method |

Full text of abbreviated H statements

| | |
|------|--|
| H272 | May intensify fire; oxidizer. |
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

| | |
|-------------------------|--|
| Acute Tox. 4, H302 | ACUTE TOXICITY (oral) - Category 4 |
| Aquatic Acute 1, H400 | AQUATIC HAZARD (ACUTE) - Category 1 |
| Aquatic Chronic 2, H411 | AQUATIC HAZARD (LONG-TERM) - Category 2 |
| Eye Dam. 1, H318 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 |
| Eye Irrit. 2, H319 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| Ox. Sol. 3, H272 | OXIDIZING SOLIDS - Category 3 |
| Resp. Sens. 1, H334 | RESPIRATORY SENSITIZATION - Category 1 |
| Skin Irrit. 2, H315 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT SE 3, H335 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |

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.