PRODUCT SAFETY DATA SHEET



1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY IDENTIFICATION.

Trade Name: DETTOL Complete Clean Multi Action Dilutable - Green Apple

Product Format: Liquid

Product Use: All purpose cleanser to be used 'as is' or in dilutable form

Supplier in UK: Supplier in The Republic Of Ireland:

Reckitt Benckiser Ireland Ltd

Wellcroft House 7 Riverwalk

Wellcroft Road Citywest Business Campus

Slough, Dublin 24
Berkshire Ireland

SL1 4AQ

Contact Telephone: 0845 769 7079 Contact Telephone: 01 661 7318

Hours of Operation: 08:30 - 16:30 weekdays Hours of Operation: 09:00 - 17:00 weekdays

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Date Issued: RB Ref No: Issue: RB parent code: Revisions:

24 Jul 2012 2538115402 2 D0148539 v2 New MSDS version

2. HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture

Product definition : Mixture
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; R36/38

Human health hazards : Irritating to eyes and skin.

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 symbol or symbols

×

Indication of danger : Irritant

Risk phrases : R36/38- Irritating to eyes and skin.



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

S28- After contact with skin, wash immediately with plenty of water.

S46- If swallowed, seek medical advice immediately and show this container or label.

Supplemental label

elements

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant

: Not applicable.

fastenings

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not : Not available.

result in classification

3. Composition / Information on Ingredients.

Substance/mixture : Mixture

			Classification		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
Amines, C10-16- alkyldimethyl, N-oxides	EC: 274-687-2 CAS: 70592-80-2	< 2.5	Xi; R41, R38 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400	[1]
Poly(oxy-1,2- ethanediyl), α-(2- propylheptyl)-ω- hydroxy-	CAS: 160875-66-1	< 2.5	Xn; R22 Xi; R41	Not classified	[1]
Alkyldimethylbenzyl ammonium chloride	EC: 270-325-2 CAS: 68424-85-1 Index: 612-140-00-5	< 2.5	Xn; R21/22 C; R34 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400	[1]
Ethanolamine	EC: 205-483-3 CAS: 141-43-5 Index: 603-030-00-8	0.25 - 1	Xn; R20/21/22 C; R34	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Irrit. 2, H319 STOT SE 3, H335	[1] [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

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

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.

- [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

Occupational exposure limits, if available, are listed in Section 8.



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 : Move exposed person to fresh air. Get medical attention if adverse health effects

persist or are severe.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash

clothing before reuse.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. 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. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. 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

Potential acute health effects

Eye contact : Irritating to eyes.

Inhalation : No known significant effects or critical hazards.

Skin contact : Irritating to skin.

Ingestion : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

irritation watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

irritation redness

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.



5. FIREFIGHTING MEASURES.

5.1 Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

5.2 Special hazards arising from the substance or mixture

None known

metal oxide/oxides

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

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.

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.

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 vapor 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 Section 8 for additional information on hygiene measures.

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

: Stop leak if safe to do so. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

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.



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 vapor 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.

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. 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 Industrial sector specific solutions Not available.Not available.



8. EXPOSURE CONTROLS AND 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	Exposure limit values		
Ethanolamine	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 2.5 mg/m³ 8 hour(s). TWA: 1 ppm 8 hour(s). STEL: 7.6 mg/m³ 15 minute(s). STEL: 3 ppm 15 minute(s).		

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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8.2 Manufacturer: Exposure controls

Appropriate engineering controls

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure 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 or dusts.

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.

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, air-purifying or air-fed 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.

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.



9. PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Clear.] Color : Blue.

Green.

Odor : Characteristic. **Odor threshold** : Not available. pН : 10.5 to 11.5 : Not available. Melting point/freezing point Initial boiling point and boiling : Not available.

range

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.

Vapor pressure : Not available. : Not available. Vapor density : 0.993 to 1.003 g/cm³ Density

Solubility(ies) : Easily soluble in the following materials: cold water and hot water.

Partition coefficient: n-

octanol/water

: Not available.

: Not available.

Decomposition temperature : Not available. : Not available. **Viscosity** : Not available. **Explosive properties**

9.2 Other information

No additional information.

Oxidizing properties

10. STABILITY AND REACTIVITY.

: No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

10.2 Chemical stability : The product is stable.

reactions

10.3 Possibility of hazardous: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Keep away from extreme heat. Protect from moisture.

10.5 Incompatible materials : Do not mix with Other Products

10.6 Hazardous

decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.



11. TOXICOLOGICAL INFORMATION.

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Alkyldimethylbenzyl ammonium chloride	LD50 Oral	Rat	426 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Alkyldimethylbenzyl	Skin - Severe irritant	Rabbit	-	25 milligrams	-
ammonium chloride					

Skin : Irritating to skin.

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.

Potential acute health effects

Eye contact : Irritating to eyes.

Inhalation : No known significant effects or critical hazards.

Skin contact : Irritating to skin.

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:

irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

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.

12. ECOLOGICAL INFORMATION.

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Amines, C10-16- alkyldimethyl, N-oxides	Chronic NOEC 700 ug/L Fresh water	Daphnia - Daphnia magna - <12 hours	21 days
Alkyldimethylbenzyl ammonium chloride	EC50 0.016 mg/l	Daphnia	48 hours
	Acute EC50 670 ug/L Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	96 hours
	Acute LC50 0.28 ppm Fresh water	Fish - Pimephales promelas	96 hours

12.2 Persistence and degradability

No known effect according to our database.

12.3 Bioaccumulative potential

No known effect according to our database.

12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

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.



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

: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

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.

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.

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



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.

1272/20081

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.

Europe

Full text of abbreviated H

statements

: H302 Harmful if swallowed. H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation. Causes serious eye damage. H318 H319 Causes serious eve irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

Full text of classifications

[CLP/GHS]

ACUTE TOXICITY: ORAL - Category 4 : Acute Tox. 4. H302 Acute Tox. 4, H312 ACUTE TOXICITY: SKIN - Category 4

Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2

Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

ACUTE TOXICITY: INHALATION - Category 4 Acute Tox. 4, H332 STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3

Aquatic Acute 1, H400 AQUATIC TOXICITY (ACUTE) - Category 1

Full text of abbreviated R

phrases

: R22- Harmful if swallowed.

R21/22- Harmful in contact with skin and if swallowed.

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

R34- Causes burns.

R41- Risk of serious damage to eyes.

R38- Irritating to skin.

R36/38- Irritating to eyes and skin. R50- Very toxic to aquatic organisms.

Full text of classifications

[DSD/DPD]

: C - Corrosive Xn - Harmful

Xi - Irritant

N - Dangerous for the environment

The Product Identification Code (in Section 1) is in conformance with EN 15178 for the identification of products in emergency enquiries

This document complements the technical usage instructions but does not replace them. The information contained herein is based on our best current knowledge if 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 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.