SAFETY DATA SHEET
M&S ANTIBACTERIAL KITCHEN CLEANER

According to Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name M&S ANTIBACTERIAL KITCHEN CLEANER

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

Identified uses Trigger spray cleaner for use in the kitchen.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

Marks and Spencer PLC
Waterside House
35 North Wharf Road
London.
W2 1NW
Tel: 01342 870900

1.4. Emergency telephone number

01342 870900

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Not classified.

2.2. Label elements

Detergent Labelling

< 5%	non-ionic surfactants
	perfumes

Risk Phrases

NC	Not classified.

Safety Phrases

S2	Keep out of the reach of children.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S46	If swallowed, seek medical advice immediately and show this container or label.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ETHANOL	**10 - <15%**
CAS-No.: 64-17-5	**EC No.: 200-578-6**
Classification (EC 1272/2008) Flam. Liq. 2 - H225	Classification (67/548/EEC) F;R11

D-GLUCOPYRANOSE, OLIGOMERIC, C10-16-ALKYL GLYCOSIDES		1 - <2.5%
CAS-No.: 110615-47-9	EC No.:	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Dam. 1 - H318	Classification (67/548/EEC) Xi;R38,R41.	

2-tert-BUTYLCYCLOHEXYL ACETATE		< 1%
CAS-No.: 88-41-5	EC No.: 201-828-7	
Classification (EC 1272/2008) Aquatic Chronic 2 - H411	Classification (67/548/EEC) N;R51/53.	

PROPAN-2-OL		< 1%
CAS-No.: 67-63-0	EC No.: 200-661-7	
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	Classification (67/548/EEC) F;R11 Xi;R36 R67	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.

Skin contact

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

Spray mists may cause respiratory tract irritation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

Prolonged contact may cause redness and/or tearing.

4.3. Indication of any immediate medical attention and special treatment needed

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Fire creates: Oxides of: Carbon. Nitrogen. Sulphur.

5.3. Advice for firefighters

Protective equipment for fire-fighters

Use protective equipment appropriate for surrounding materials.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Avoid contact with skin and eyes. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid prolonged contact with wood, aluminium and painted, varnished or soft porous surfaces. Do not use on worn, damaged or cracked surfaces.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep containers tightly closed. Store in closed original container at temperatures between 5°C and 25°C.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANOL	WEL	1000 ppm	1920 mg/m3			
PROPAN-2-OL	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	

WEL = Workplace Exposure Limit.

ETHANOL (CAS: 64-17-5)

DNEL				
Workers	Inhalation.	Short Term	Local Effects	1900 mg/m3
Workers	Dermal	Long Term	Systemic Effects	343 mg/kg/day
Workers	Inhalation.	Long Term	Systemic Effects	950 mg/m3
Consumer	Inhalation.	Short Term	Local Effects	950 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	206 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	114 mg/m3
Consumer	Oral	Long Term	Systemic Effects	87 mg/kg/day

PNEC		
Freshwater	0.96	mg/l
Marinewater	0.79	mg/l
Intermittent release	2.75	mg/l
STP	580	mg/l
Sediment (Freshwater)	3.6	mg/kg
Sediment (Marinewater)	2.9	mg/kg
Soil	0.63	mg/kg

PROPAN-2-OL (CAS: 67-63-0)

DNEL				
Workers	Inhalation.	Long Term	Systemic Effects	500 mg/m3
Workers	Dermal	Long Term	Systemic Effects	888 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	89 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	319 mg/kg/day
Consumer	Oral	Long Term	Systemic Effects	26 mg/kg/day

PNEC		
Freshwater	140.9	mg/l
Marinewater	140.9	mg/l
Intermittent release	140.9	mg/l
STP	2251	mg/l
Sediment (Freshwater)	552	mg/kg
Sediment (Marinewater)	552	mg/kg
Soil	28	mg/kg

D-GLUCOPYRANOSE, OLIGOMERIC, C10-16-ALKYL GLYCOSIDES (CAS: 110615-47-9)

DNEL				
Workers	Inhalation.	Long Term	Systemic Effects	420 mg/m3
Workers	Dermal	Long Term	Systemic Effects	595000 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	124 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	357000 mg/kg/day
Consumer	Oral	Long Term	Systemic Effects	35.7 mg/kg/day

8.2. Exposure controls

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Hygiene measures

When using do not eat, drink or smoke. Wash promptly with soap & water if skin becomes contaminated. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Slightly hazy liquid
Colour	Colourless.
Odour	Pleasant, agreeable.
Solubility	Soluble in water.
Initial boiling point and boiling range (°C)	~ 100 °C

Melting point (°C)

Not relevant

Relative density	1.01

Vapour density (air=1)

Not relevant

Vapour pressure

Not relevant

pH-Value, Conc. Solution 6 - 7

Viscosity

Not relevant

Flash point (°C)

Scientifically unjustified.

Auto Ignition Temperature (°C)

Scientifically unjustified.

Flammability Limit - Lower(%)

Scientifically unjustified.

Partition Coefficient (N-Octanol/Water)

Not relevant

Explosive properties

Not relevant

Oxidising properties

Not relevant

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight. Avoid contact with acids and alkalis.

10.5. Incompatible materials

Materials To Avoid

No specific, or groups of materials are likely to react to produce a hazardous situation.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Not irritating. Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Not Irritating. Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Not Sensitising. Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Does not contain any substances known to be mutagenic. Based on available data the classification criteria are not met.

Carcinogenicity:

Does not contain any substances known to be carcinogenic.

Reproductive Toxicity:

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure:

Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard:

Not anticipated to present an aspiration hazard based on chemical structure.

Toxicological information on ingredients.

Acute toxicity:

Acute Toxicity (Oral LD50)

10470 mg/kg Rat

REACH dossier information

Conclusive data but not sufficient for classification.

Acute Toxicity (Inhalation LC50)

124.7 mg/l (vapours) Rat 4 hours

REACH dossier information

Conclusive data but not sufficient for classification.

Skin Corrosion/Irritation:

Dose

0.2 mL 1 day Rabbit

Erythema\eschar score

No erythema (0).

Oedema score

No oedema (0).

REACH dossier information

Not irritating.

Serious eye damage/irritation:

Moderately Irritating.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

REACH dossier information

Negative.

Conclusive data but not sufficient for classification.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Inconclusive.

Inconclusive data.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Two-generation study: NOAEL 15 % v/v Oral Mouse P

REACH dossier information

This substance has no evidence of toxicity to reproduction. Conclusive data but not sufficient for classification.

Reproductive Toxicity - Development

Developmental toxicity: LOAEL 8200 mg/kg/day Oral Rat

REACH dossier information

This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 10 mg/kg/day Oral Rat

REACH dossier information

Target Organs

Kidneys

Not classified as a specific target organ toxicant after repeated exposure.

PROPAN-2-OL (CAS: 67-63-0)

Acute toxicity:

Acute Toxicity (Oral LD50)

5840 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

16.4 ml/kg Rabbit

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

~ 5000 ppmV (gas) Rat 6 hours

REACH dossier information

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Dose

4 hr Rabbit

Primary dermal irritation index (PDI)

0

REACH dossier information

Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Irritating to eyes.

Respiratory or skin sensitisation:

Skin sensitisation

Buehler test: Guinea Pig

REACH dossier information

Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Carcinogenicity:

Carcinogenicity

NOAEL 5000 ppm Inhalation. Rat

REACH dossier information

IARC Carcinogenicity

IARC Group 3 Not classifiable as to its carcinogenicity to humans.

2-tert-BUTYLCYCLOHEXYL ACETATE (CAS: 88-41-5)

Toxicological information

Based on available data the classification criteria are not met.

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rabbit

REACH dossier information

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Dose

0.5 g 4 hr Rabbit

Erythema\eschar score

Moderate to severe erythema (3).

Oedema score

Slight oedema - edges of area well defined by definite raising (2).

REACH dossier information

Irritating to skin.

Serious eye damage/irritation:

Risk of serious damage to eyes.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Chromosome aberration:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Genotoxicity - In Vivo

Chromosome aberration:

REACH dossier information

Negative.

Based on available data the classification criteria are not met.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

One-generation study: NOAEL 1000 mg/kg Oral Rat P

REACH dossier information

No evidence of reproductive toxicity in animal studies

Reproductive Toxicity - Development

Developmental toxicity: NOAEL 1000 mg/kg Oral Rat

REACH dossier information

No evidence of reproductive toxicity in animal studies

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute Fish Toxicity

Not considered toxic to fish.

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Acute Toxicity - Fish

LC50 96 hours 15300 mg/l Pimephales promelas (Fat-head Minnow)
REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 5012 mg/l Ceriodaphnia dubia
REACH dossier information

PROPAN-2-OL (CAS: 67-63-0)

Acute Toxicity - Fish

LC50 96 hours 10000 mg/l Pimephales promelas (Fat-head Minnow)
REACH dossier information

Acute Toxicity - Aquatic Invertebrates

LC50 24 hours > 10000 mg/l Daphnia magna
REACH dossier information

2-tert-BUTYLCYCLOHEXYL ACETATE (CAS: 88-41-5)

Acute Fish Toxicity

Toxic to aquatic organisms.

D-GLUCOPYRANOSE, OLIGOMERIC, C10-16-ALKYL GLYCOSIDES (CAS: 110615-47-9)

Acute Toxicity - Fish

LC50 96 hours 2.95 mg/l Brachydanio rerio (Zebra Fish)
LC0 96 hours 2 mg/l Brachydanio rerio (Zebra Fish)
REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 7 mg/l Daphnia magna
REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 72 hours 5 mg/l Desmodesmus subspicatus
REACH dossier information

Acute Toxicity - Microorganisms

EC0 16 hours 5000 mg/l Pseudomonas putida
REACH dossier information

Chronic Toxicity - Fish Early life Stage

LC50 28 days 3.2 mg/l Brachydanio rerio (Zebra Fish)
NOEC 28 days 1 mg/l Brachydanio rerio (Zebra Fish)
REACH dossier information

Chronic Toxicity - Aquatic Invertebrates

NOEC 21 days 2 mg/l Daphnia magna
REACH dossier information

12.2. Persistence and degradability

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.

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Biodegradation

Water Degradation (74%) 5 days
REACH dossier information
The substance is readily biodegradable.

Chemical Oxygen Demand

1.99 g O2/g substance
REACH dossier information

PROPAN-2-OL (CAS: 67-63-0)

Biodegradation

Water Degradation (53%) 5 days
REACH dossier information
The substance is readily biodegradable.

Biological Oxygen Demand

1.19 g O2/g substance
REACH dossier information

2-tert-BUTYLCYCLOHEXYL ACETATE (CAS: 88-41-5)

Degradability

May cause long-term adverse effects in the aquatic environment.

D-GLUCOPYRANOSE, OLIGOMERIC, C10-16-ALKYL GLYCOSIDES (CAS: 110615-47-9)

Phototransformation

Air. DT50 4.647 hours
Air. DT50 2.465 hours
REACH dossier information Estimated Value

Stability (Hydrolysis)

pH4 Recovery(%) = 97 5 days @ 50 °C
pH7 Recovery(%) = 99 5 days @ 50 °C
pH9 Recovery(%) = 101 5 days @ 50 °C
REACH dossier information

Biodegradation

Water Degradation (88%) 28 days
Water and Sediment Degradation (> 99.4%) 28 days
REACH dossier information
The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not relevant

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Partition coefficient

log Pow -0.35
REACH dossier information

PROPAN-2-OL (CAS: 67-63-0)

Bioaccumulative potential

No data available on bioaccumulation.

2-tert-BUTYLCYCLOHEXYL ACETATE (CAS: 88-41-5)

Bioaccumulative potential

No data available on bioaccumulation.

D-GLUCOPYRANOSE, OLIGOMERIC, C10-16-ALKYL GLYCOSIDES (CAS: 110615-47-9)

Partition coefficient

log Pow < = -0.07 @ 20 °C
REACH dossier information Estimated Value

12.4. Mobility in soil

Mobility:

The product is soluble in water.

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Surface tension

24.5 mN/m 20 °C

REACH dossier information

PROPAN-2-OL (CAS: 67-63-0)

Mobility:

No data available.

2-tert-BUTYLCYCLOHEXYL ACETATE (CAS: 88-41-5)

Mobility:

No data available.

D-GLUCOPYRANOSE, OLIGOMERIC, C10-16-ALKYL GLYCOSIDES (CAS: 110615-47-9)

Adsorption/Desorption Coefficient

Soil log Koc 1.7 @ 25 °C

Henry's Law Constant

0.00000002 Pa m3/mol @ 25 °C

REACH dossier information Estimated Value

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport Labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

This is first issue.

Revision Date 01-2014

Risk Phrases In Full

R11	Highly flammable
R36	Irritating to eyes.
R38	Irritating to skin.
NC	Not classified.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.