SAFETY DATA SHEET

Quantum Multi-Surface Cleaner

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

1.1. Product identifier

Product name Quantum Multi-Surface Cleaner

Product number ZGBMULTCLEN750

Internal identification B50931, 30075

Container size 500ML BOTTLES TO 25 LITRE DRUMS

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

Identified uses Cleaning agent. Household and Institutional Hard Surface Cleaner Car maintenance product.

Uses advised against This product is not recommended for any industrial, professional or consumer use other than the identified uses stated above.

1.3. Details of the supplier of the safety data sheet

Supplier

Volkswagen Group United Kingdom Ltd
Yeomans Drive
Blakelands
Milton Keynes

MK14 5AN
01908 601601

1.4. Emergency telephone number

Emergency telephone Tel:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards
Not Classified

Health hazards
Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

Environmental hazards
Not Classified

Classification (67/548/EEC or 1999/45/EC)

Human health
The liquid is irritating to eyes and skin.

2.2. Label elements

Pictogram

Signal word Warning

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements

Quantum Multi-Surface Cleaner

P264 Wash contaminated skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P102 Keep out of reach of children.

Detergent labelling < 5% anionic surfactants, < 5% EDTA and salts thereof, < 5% non-ionic surfactants, < 5% perfumes, < 5% phosphates, Contains CITRAL, BENZISOTHIAZOLINONE

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

2-BUTOXYETHANOL **1-5%**

CAS number: 111-76-2 **EC number:** 203-905-0 **REACH registration number:** 01-2119475108-36-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Xn;R20/21/22 Xi;R36/38

DISODIUM SILICATE PENTAHYDRATE **1-5%**

CAS number: 10213-79-3 **EC number:** 229-912-9 **REACH registration number:** 01-2119449811-37-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Met. Corr. 1 - H290 Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335	C;R34. Xi;R37.

Tetrapotassium Pyrophosphate **<1%**

CAS number: 7320-34-5 **EC number:** 230-785-7 **REACH registration number:** 01-2119489369-18-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319	Xi;R36.

SODIUM HYDROXIDE **<1%**

CAS number: 1310-73-2 **EC number:** 215-185-5 **REACH registration number:** 01-2119457892-27-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Corr. 1A - H314 Eye Dam. 1 - H318	C;R35

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PROPYLENE GLYCOL **<1%**

CAS number: 57-55-6 **EC number:** 200-338-0 **REACH registration number:** 01-2119456809-23-XXXX

Classification	Classification (67/548/EEC or 1999/45/EC)
Not Classified	-

GERANYL ACETATE **<1%**

CAS number: 105-87-3 **EC number:** 203-341-5

Classification	Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335 Aquatic Chronic 2 - H411	Xi R38, R43; N;R51/53.

CAMPHENE **<1%**

CAS number: 79-92-5 **EC number:** 201-234-8

M factor (Acute) = 1 **M factor (Chronic) =** 1

Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Sol. 2 - H228 Eye Irrit. 2 - H319 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Xi;R36. N;R50/53. R10.

BENZYL BENZOATE **<1%**

CAS number: 120-51-4 **EC number:** 204-402-9

M factor (Acute) = 1

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411	Xn;R22. N;R51/53.

BENZYL SALICYLATE **<1%**

CAS number: 118-58-1 **EC number:** 204-262-9

Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 2 - H371 Aquatic Chronic 2 - H411	N;R51/53. R43.

4-ALLYL-2-METHOXYPHENOL **<1%**

CAS number: 97-53-0 **EC number:** 202-589-1

Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319 Skin Sens. 1B - H317	Xi;R36. R43.

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

Quantum Multi-Surface Cleaner

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

Inhalation

Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes and get medical attention.

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

General information

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

Inhalation

This is unlikely to occur but symptoms similar to those of ingestion may develop.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact

Skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

Eye contact

Irritation and redness, followed by blurred vision. May cause severe eye irritation.

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

Notes for the doctor

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media

No unsuitable extinguishing media noted

5.2. Special hazards arising from the substance or mixture

Specific hazards

The product is non-combustible. Toxic gases or vapours. No unusual fire or explosion hazards noted.

Hazardous combustion products

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide. Nitrogen oxides.

5.3. Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapours. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

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

6.2. Environmental precautions

Environmental precautions

Large spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in appropriate containers.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Large Spillages: Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Do not dispose of product down drains or sewers.

6.4. Reference to other sections

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

Avoid spilling. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid freezing. Keep only in the original container.

Storage class

Chemical storage.

7.3. Specific end use(s)

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

Occupational exposure limits

Quantum Multi-Surface Cleaner

2-BUTOXYETHANOL

Long-term exposure limit (8-hour TWA): WEL 25 ppm 123 mg/m3
Short-term exposure limit (15-minute): WEL 50 ppm 246 mg/m3
Sk

Tetrapotassium Pyrophosphate

No exposure limit value known.

SODIUM HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m3

PROPYLENE GLYCOL

Long-term exposure limit (8-hour TWA): WEL 474 mg/m3 150 ppm particulate vapour
Long-term exposure limit (8-hour TWA): WEL 10 mg/m3 particulate

GERANYL ACETATE

No exposure limit value known.

CAMPHENE

No exposure limit value known.

BENZYL BENZOATE

No exposure limit value known.

BENZYL SALICYLATE

No exposure limit value known.

4-ALLYL-2-METHOXYPHENOL

No exposure limit value known.

WEL = Workplace Exposure Limit
Sk = Can be absorbed through skin.

Ingredient comments

WEL = Workplace Exposure Limits

2-BUTOXYETHANOL (CAS: 111-76-2)

DNEL	Industry - Dermal; Short term : 89 mg/kg/day Industry - Inhalation; Short term : 663 mg/m3 Industry - Dermal; Long term : 75 mg/kg/day Industry - Inhalation; Long term : 98 mg/m3 Consumer - Dermal; Short term : 44.5 mg/kg/day Consumer - Oral; Short term : 13.4 mg/kg/day Consumer - Inhalation; Short term : 123 mg/m3 Consumer - Inhalation; Long term : 49 mg/m3
PNEC	- Fresh water; 8.8 mg/l - Marine water; 0.88 mg/l - Soil; 3.13 mg/kg soil dw - Intermittent release; 9.1 mg/l - Sediment (Freshwater); 34.6 mg/kg sediment dw - Sediment (Marinewater); 3.46 mg/kg sediment dw - STP; 463 mg/l

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DISODIUM SILICATE PENTAHYDRATE (CAS: 10213-79-3)

Ingredient comments

No exposure limits known for ingredient(s).

DNEL	Workers - Inhalation; Long term systemic effects: 6.22 mg/m³ Workers - Dermal; Long term systemic effects: 1.49 mg/kg bw/day General population - Inhalation; Long term systemic effects: 1.55 mg/m³ General population - Dermal, Oral; Long term systemic effects: 0.74 mg/kg bw/day
PNEC	- Fresh water; 7.5 mg/l - Marine water; 1 mg/l - Intermittent release; 7.5 mg/l - STP; 1000 mg/l

Tetrapotassium Pyrophosphate (CAS: 7320-34-5)

DNEL	Workers - Inhalation; Long term systemic effects: 44.08 mg/m³ General population - Inhalation; Long term systemic effects: 10.87 mg/m³
PNEC	- Fresh water; 0.05 mg/l - Marine water; 0.005 mg/l - Intermittent release; 0.5 mg/l - STP; 50 mg/l

Sulfonic Acids, C14-C16-Alkane Hydroxy and C14-C16-Alkene, Sodium Salts (CAS: 68439-57-6)

DNEL	Workers - Inhalation; Long term systemic effects: 152.22 mg/m³ General population - Inhalation; Long term systemic effects: 45.04 mg/m³ General population - Oral; Long term systemic effects: 12.95 mg/kg bw/day
PNEC	- Fresh water; 0.024 mg/l - Marine water; 0.0024 mg/l - Intermittent release; 0.0197 mg/l - STP; 4 mg/l - Sediment (Freshwater); 0.767 mg/kg sediment dw - Sediment (Marinewater); 0.0767 mg/kg sediment dw - Soil; 1.21 mg/kg soil dw

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL	Consumer - Inhalation; local effects: 1 mg/m3 Industry - Inhalation; Long term local effects: 1 mg/m3

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

DNEL	Workers - Inhalation; Long term local effects: 1.5 mg/m³ Workers - Inhalation; Short term Acute: 1.5 mg/m³ General population - Inhalation; Long term local effects: 0.6 mg/m³ General population - Oral; Long term systemic effects: 25 mg/kg bw/day
PNEC	- Fresh water; 2.2 mg/l - Marine water; 0.22 mg/l - Intermittent release; 1.2 mg/l - STP; 43 mg/l - Soil; 0.72 mg/kg soil dw

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PROPYLENE GLYCOL (CAS: 57-55-6)

DNEL	Industry - Inhalation; Long term systemic effects: 168 mg/m3 Industry - Inhalation; Long term local effects: 10 mg/m3 Consumer - Inhalation; Long term systemic effects: 50 mg/m3 Consumer - Inhalation; Long term local effects: 10 mg/m3
PNEC	- Fresh water; 260 mg/l - Marine water; 26 mg/l - STP; 20000 mg/kg - Sediment (Freshwater); 572 mg/kg - Sediment (Marinewater); 57.2 mg/kg - Soil; 50 mg/kg - Intermittent release; 183 mg/l

CITRAL (CAS: 5392-40-5)

DNEL	Workers - Inhalation; Long term systemic effects: 9 mg/m³ Workers - Dermal; Long term systemic effects: 1.7 mg/kg bw/day Workers - Dermal; Long term local effects: 0.14 mg/cm² General population - Inhalation; Long term systemic effects: 2.7 mg/m³ General population - Dermal; Long term systemic effects: 1 mg/kg bw/day General population - Dermal; Long term local effects: 0.14 mg/cm² General population - Oral; Long term systemic effects: 0.6 mg/kg bw/day
PNEC	- Fresh water; 0.00678 mg/l - Marine water; 0.000678 mg/l - Intermittent release; 0.0678 mg/l - STP; 1.6 mg/l - Sediment (Freshwater); 0.125 mg/kg sediment dw - Sediment (Marinewater); 0.0125 mg/kg sediment dw - Soil; 0.0209 mg/kg soil dw

SODIUM SULPHATE (CAS: 7757-82-6)

DNEL	Workers - Inhalation; Long term systemic effects: 22.4 mg/m³ Workers - Dermal; Long term systemic effects: 3.2 mg/kg bw/day General population - Inhalation; Long term systemic effects: 5.4 mg/m³ General population - Dermal, Oral; Long term systemic effects: 1.6 mg/kg bw/day
PNEC	- Fresh water; 22 mg/l - Marine water; 2.2 mg/l - Intermittent release; 11.5 mg/l - STP; 800 mg/l - Sediment (Freshwater); 17.2 mg/kg sediment dw - Sediment (Marinewater); 1.72 mg/kg sediment dw - Soil; 2.61 mg/kg soil dw

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TRISODIUM NITRILOTRIACETATE (CAS: 5064-31-3)

DNEL
Industry - Inhalation; Short term systemic effects: 5.25 mg/m3
Industry - Inhalation; Short term local effects: 5.25 mg/m3
Industry - Inhalation; Long term systemic effects: 3.2 mg/m3
Consumer - Inhalation; Short term systemic effects: 1.75 mg/m3
Consumer - Oral; Long term systemic effects: 0.3 mg/kg bw/day
Workers - Inhalation; Short term Acute: 9.6 mg/m³
General population - Inhalation; Short term Acute: 2.4 mg/m³
General population - Oral; Short term Acute: 0.9 mg/kg bw/day

PNEC
- Fresh water; 0.93 mg/l
- Marine water; 0.093 mg/l
- Intermittent release; 0.8 mg/l
- STP; 270 mg/l
- Sediment (Freshwater); 3.64 mg/kg
- Sediment (Marinewater); 0.364 mg/kg
- Soil; 0.182 mg/kg

d-LIMONENE (CAS: 5989-27-5)

DNEL
Workers - Inhalation; Long term systemic effects: 33.3 mg/m³
Workers - Dermal; Short term local effects, Acute: 0.222 mg/cm²
General population - Inhalation; Long term systemic effects: 8.33 mg/m³
General population - Dermal; Short term local effects, Acute: 0.111 mg/cm²
General population - Oral; Long term systemic effects: 4.76 mg/kg bw/day

PNEC
- Fresh water; 0.0054 mg/l
- Marine water; 0.00054 mg/l
- STP; 1.8 mg/l
- Sediment (Freshwater); 1.32 mg/kg sediment dw
- Marine water; 0.13 mg/kg sediment dw
- Soil; 0.262 mg/kg soil dw

GERANYL ACETATE (CAS: 105-87-3)

DNEL
Workers - Inhalation; Long term systemic effects: 62.59 mg/m³
Workers - Dermal; Long term systemic effects: 35.5 mg/kg bw/day
General population - Inhalation; Long term systemic effects: 15.4 mg/m³
General population - Dermal; Long term systemic effects: 17.75 mg/kg bw/day
General population - Oral; Long term systemic effects: 8.9 mg/kg bw/day

PNEC
- Fresh water; 0.00372 mg/l
- Marine water; 0.000372 mg/l
- Intermittent release; 0.0372 mg/l
- STP; 8 mg/l
- Sediment (Freshwater); 0.442 mg/kg sediment dw
- Sediment (Marinewater); 0.0442 mg/kg sediment dw
- Soil; 0.0859 mg/kg soil dw

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GERANIOL (CAS: 106-24-1)

DNEL
Workers - Inhalation; Long term systemic effects: 161.6 mg/m³
Workers - Dermal; Long term systemic effects: 12.5 mg/kg bw/day
Workers - Dermal; Long term local effects: 11.8 mg/cm²
General population - Inhalation; Long term systemic effects: 47.8 mg/m³
General population - Dermal; Long term systemic effects: 7.5 mg/kg bw/day
General population - Dermal; Long term local effects: 11.8 mg/cm²
General population - Oral; Long term systemic effects: 13.75 mg/kg bw/day

PNEC
- Fresh water; 0.0108 mg/l
- Marine water; 0.00108 mg/l
- Intermittent release; 0.108 mg/l
- STP; 0.7 mg/l
- Sediment (Freshwater); 0.115 mg/kg
- Sediment (Marinewater); 0.0115 mg/kg
- Soil; 0.0167 mg/kg

CAMPHENE (CAS: 79-92-5)

DNEL
Workers - Inhalation; Long term, Short term systemic effects, Acute: 110.19 mg/m³
Workers - Dermal; Long term systemic effects: 0.21 mg/kg bw/day
Workers - Dermal; Short term Acute: 1.25 mg/kg bw/day
General population - Inhalation; Long term, Short term systemic effects, Acute: 54.3 mg/m³
General population - Dermal, Oral; Long term systemic effects: 0.1 mg/kg bw/day
General population - Dermal, Oral; Short term Acute: 0.625 mg/kg bw/day

PNEC
- Fresh water; 0.00072 mg/l
- Marine water; 0.000072 mg/l
- Intermittent release; 0.00072 mg/l
- STP; 10 mg/l
- Sediment (Freshwater); 0.0262 mg/kg sediment dw
- Sediment (Marinewater); 0.00262 mg/kg sediment dw
- Soil; 0.0211 mg/kg soil dw

3,7-DIMETHYL-1,6-OCTADIEN-3-OL (CAS: 78-70-6)

DNEL
Workers - Inhalation; Long term systemic effects: 2.8 mg/m³
Workers - Inhalation; Short term Acute: 16.5 mg/m³
Workers - Dermal; Long term systemic effects: 2.5 mg/kg bw/day
Workers - Dermal; Short term Acute: 5 mg/kg bw/day
Workers - Dermal; Long term local effects: 15 mg/cm²
Workers - Dermal; Short term Acute: 15 mg/cm²
General population - Inhalation; Long term systemic effects: 0.7 mg/m³
General population - Inhalation; Short term Acute: 4.1 mg/m³
General population - Dermal; Long term systemic effects: 1.25 mg/kg bw/day
General population - Dermal; Short term Acute: 2.5 mg/kg bw/day
General population - Dermal; Long term local effects: 15 mg/cm²
General population - Dermal; Short term Acute: 15 mg/cm²
General population - Oral; Long term systemic effects: 0.2 mg/kg bw/day
General population - Oral; Short term Acute: 1.2 mg/kg bw/day

PNEC
- Fresh water; 0.2 mg/l
- Marine water; 0.02 mg/l
- Intermittent release; 2 mg/l
- STP; 10 mg/l
- Sediment (Freshwater); 2.22 mg/kg sediment dw
- Sediment (Marinewater); 0.222 mg/kg sediment dw
- Soil; 0.327 mg/kg soil dw

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CITRONELLOL (CAS: 106-22-9)

DNEL	Workers - Inhalation; Long term systemic effects: 161.6 mg/m³ Workers - Inhalation; Long term local effects: 10 mg/m³ Workers - Inhalation; Short term Acute: 10 mg/m³ Workers - Dermal; Long term systemic effects: 327.4 mg/kg bw/day General population - Inhalation; Long term systemic effects: 47.8 mg/m³ General population - Inhalation; Long term local effects: 10 mg/m³ General population - Inhalation; Short term Acute: 10 mg/m³ General population - Dermal; Long term systemic effects: 196.4 mg/kg bw/day General population - Dermal; Short term local effects, Acute: 2.950 mg/cm² Workers - Dermal; Short term Acute, local effects: 2.950 mg/cm² General population - Oral; Long term systemic effects: 13.8 mg/kg bw/day
PNEC	- Fresh water; 0.0024 mg/l - Marine water; 0.00024 mg/l - Intermittent release; 0.024 mg/l - STP; 580 mg/l - Sediment (Freshwater); 0.0256 mg/kg sediment dw - Sediment (Marinewater); 0.00256 mg/kg sediment dw - Soil; 0.00371 mg/kg soil dw

BENZYL BENZOATE (CAS: 120-51-4)

DNEL	Workers - Inhalation; Long term systemic effects: 5.1 mg/m³ Workers - Inhalation; Short term Acute: 102 mg/m³ Workers - Dermal; Long term systemic effects: 2.6 mg/kg bw/day General population - Inhalation; Long term systemic effects: 1.25 mg/m³ General population - Dermal; Long term systemic effects: 1.3 mg/kg bw/day General population - Oral; Long term systemic effects: 0.4 mg/kg bw/day General population - Oral; Short term Acute: 78 mg/kg bw/day
PNEC	- Fresh water; 0.0168 mg/l - Marine water; 0.00168 mg/l - STP; 100 mg/l - Sediment (Freshwater); 10.66 mg/kg sediment dw - Sediment (Marinewater); 1.07 mg/kg sediment dw - Soil; 2.12 mg/kg soil dw

BENZYL SALICYLATE (CAS: 118-58-1)

DNEL	Workers - Inhalation; Long term systemic effects: 3.17 mg/m³ Workers - Dermal; Long term systemic effects: 0.9 mg/kg bw/day General population - Inhalation; Long term systemic effects: 0.78 mg/m³ General population - Dermal; Long term systemic effects: 0.45 mg/kg bw/day General population - Oral; Long term systemic effects: 0.45 mg/kg bw/day
PNEC	- Fresh water; 0.00103 mg/l - Marine water; 0.000103 mg/l - Intermittent release; 0.0103 mg/l - STP; 10 mg/l - Sediment (Freshwater); 0.584 mg/kg sediment dw - Sediment (Marinewater); 0.0584 mg/kg sediment dw - Soil; 0.021 mg/kg soil dw

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4-ALLYL-2-METHOXYPHENOL (CAS: 97-53-0)

DNEL	Workers - Inhalation; Long term systemic effects: 21.2 mg/m³ Workers - Dermal; Long term systemic effects: 6 mg/kg bw/day General population - Inhalation; Long term systemic effects: 5.22 mg/m³ General population - Dermal, Oral; Long term systemic effects: 3 mg/kg bw/day
PNEC	- Fresh water; 0.00113 mg/l - Marine water; 0.000113 mg/l - Intermittent release; 0.0113 mg/l - Sediment (Freshwater); 0.081 mg/kg sediment dw - Sediment (Marinewater); 0.0081 mg/kg sediment dw - Soil; 0.0155 mg/kg soil dw

8.2. Exposure controls

Protective equipment


Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Contact lenses should not be worn when working with this chemical. Use safety glasses (with side shields), consistent with EN 166 or equivalent.

Hand protection

Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Use gloves with insulation for thermal protection (EN 407), when needed. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a
protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station and safety shower. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

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

Quantum Multi-Surface Cleaner

Clear liquid.

Colour

Pink.

Odour

Slight. Lemon.

pH

pH (concentrated solution): 12.0-13.7

Melting point

-2°C

Initial boiling point and range

101°C @ 760 mm Hg

Flash point

> 150°C CC (Closed cup).

Relative density

1.018-1.026 g/ml @ 20°C

Solubility(ies)

Completely soluble in water. Aqueous solutions are basic. Miscible with the following materials: Alcohols. Almost insoluble in the following materials: Hydrocarbons.

Comments

Information given is applicable to the product as supplied.

9.2. Other information

Volatile organic compound

This product contains a maximum VOC content of 30 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid freezing.

10.5. Incompatible materials

Materials to avoid

Avoid contact with acids.

10.6. Hazardous decomposition products

Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)

71,428.57142857

Acute toxicity - dermal

ATE dermal (mg/kg)

Quantum Multi-Surface Cleaner

71428.57142857

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)

714.28571429

Carcinogenicity

This substance has no evidence of carcinogenic properties.

Reproductive toxicity

Reproductive toxicity - development

Does not contain any substances known to be toxic to reproduction.

General information

This product has low toxicity. Only large quantities are likely to have adverse effects on human health. To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion

May cause discomfort if swallowed.

Skin contact

Irritating to skin.

Eye contact

Irritating to eyes.

Acute and chronic health hazards

Not expected to be a health hazard when used under normal conditions.

Route of entry

Skin and/or eye contact

Target organs

Eyes Skin Respiratory system, lungs Gastro-intestinal tract

Medical symptoms

Irritation of eyes and mucous membranes. Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Toxicological information on ingredients.

2-BUTOXYETHANOL

Acute toxicity - oral

ATE oral (mg/kg)

2,000.0

Acute toxicity - dermal

ATE dermal (mg/kg)

2000.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)

20.0

Skin corrosion/irritation

Extreme pH

Slightly irritating. Rabbit

Serious eye damage/irritation

Slightly irritating. Rabbit

Respiratory sensitisation

Quantum Multi-Surface Cleaner

Based on available data the classification criteria are not met.

Skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro

Negative.

Genotoxicity - in vivo

Negative.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility

Based on available data the classification criteria are not met.

Reproductive toxicity - development

No evidence of reproductive toxicity in animal studies.

Inhalation

Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Ingestion

Harmful: may cause lung damage if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact

Repeated exposure may cause skin dryness or cracking.

Eye contact

Irritation of eyes and mucous membranes.

Route of entry

Ingestion Inhalation

Target organs

Brain Respiratory system, lungs Mucous membranes

Medical symptoms

Skin irritation. Irritation of eyes and mucous membranes. High concentration of vapours may irritate respiratory systemand lead to headache, fatigue, nausea and vomiting.

DISODIUM SILICATE PENTAHYDRATE

Toxicological effects

All symptoms of acute toxicity are due to high alkalinity.

Acute toxicity - oral

Acute toxicity oral (LD50 mg/kg)

1,152.0

Species

Rat

Conclusive data but not sufficient for classification.

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg)

5001.0

Species

Rabbit

ATE dermal (mg/kg)

5001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC50 dust/mist mg/l)

2.7

Species

Rat

Conclusive data but not sufficient for classification.

Skin corrosion/irritation

Animal data

Corrosive to skin. Causes severe burns.

Serious eye damage/irritation

Causes burns. Corrosive to eyes.

Respiratory sensitisation

Conclusive data but not sufficient for classification.

Skin sensitisation

Conclusive data but not sufficient for classification.

Germ cell mutagenicity

Genotoxicity - in vitro

Negative.

Genotoxicity - in vivo

Negative.

Carcinogenicity

Conclusive data but not sufficient for classification.

IARC carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

Reproductive toxicity

Reproductive toxicity - fertility

Conclusive data but not sufficient for classification.

Specific target organ toxicity - single exposure

STOT - single exposure

Inhalation - May cause respiratory irritation.

Target organs

Respiratory system, lungs

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Conclusive data but not sufficient for classification.

Aspiration hazard

Conclusive data but not sufficient for classification.

SECTION 12: Ecological Information

Ecotoxicity

Not regarded as dangerous for the environment. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Not considered toxic to fish.

Quantum Multi-Surface Cleaner

Ecological information on ingredients.

2-BUTOXYETHANOL

Acute toxicity - fish

LC_{50}, 96 hours: >100 mg/l, Fish

Acute toxicity - aquatic invertebrates

EC_{50}, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC_{50}, : 900 mg/l, Scenedesmus subspicatus

DISODIUM SILICATE PENTAHYDRATE

Acute toxicity - fish

LC_{50}, 96 hours: 210 mg/l, Brachydanio rerio (Zebra Fish) EC_{50}, 48 hours: 1700 mg/l,

12.2. Persistence and degradability

Persistence and degradability

The surfactant(s) contained in this product 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.

2-BUTOXYETHANOL

Persistence and degradability

The product is readily biodegradable.

DISODIUM SILICATE PENTAHYDRATE

Persistence and degradability

Soluble silicates are inorganic substances that when diluted they rapidly depolymerise into molecular structures similar to natural dissolved silica.

12.3. Bioaccumulative potential

Ecological information on ingredients.

2-BUTOXYETHANOL

Partition coefficient

log Pow: < 2 : 0.8

DISODIUM SILICATE PENTAHYDRATE

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility

The product is soluble in water.

Ecological information on ingredients.

2-BUTOXYETHANOL

Mobility

The product is soluble in water.

Henry's law constant

0.0098 Pa m3/mol @ °C

DISODIUM SILICATE PENTAHYDRATE

Mobility

Not applicable.

12.5. Results of PBT and vPvB assessment

Quantum Multi-Surface Cleaner

This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

2-BUTOXYETHANOL

This substance is not classified as PBT or vPvB according to current EU criteria.

DISODIUM SILICATE PENTAHYDRATE

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Ecological information on ingredients.

DISODIUM SILICATE PENTAHYDRATE

The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

The packaging must be empty (drop-free when inverted). This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

General The product is not covered by international regulations 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)

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

Quantum Multi-Surface Cleaner

National regulations

The surfactant(s) contained in this product 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.

EU legislation

Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). 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 (as amended).

Guidance

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Issued by	HS&E Manager.
Revision date	01/07/2014
Revision	1
SDS number	20546
SDS status	Approved.

Risk phrases in full

NC Not classified.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R35 Causes severe burns.
R36/38 Irritating to eyes and skin.
R37 Irritating to respiratory system.

Hazard statements in full

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.