

**Mr Muscle Multi Surface**

Revision: 2015-06-03

Version: 08.0

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

**1.1 Product identifier**

**Trade name:** Mr Muscle Multi Surface

Mr Muscle © Used under authority from S.C. Johnson & Son Inc., Racine, Wisconsin, U.S.A.

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

**Identified uses:**

For professional use only.

AISE-P301 - General purpose cleaner. Manual process

AISE-P302 - General purpose cleaner. Spray and wipe manual process

**Uses advised against:** Uses other than those identified are not recommended

**1.3 Details of the supplier of the safety data sheet**

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

**Contact details**

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: MSDSinfoUK@sealedair.com

**1.4 Emergency telephone number**

For medical or environmental emergency only:

call 0800 052 0185

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

The product does not meet the criteria for classification in accordance with Regulation (EC) No 1272/2008.

**The product does not meet the criteria for classification in accordance with Directive 1999/45/EC and corresponding national legislation**

**2.2 Label elements**

**Hazard statements:**

EUH210 - Safety data sheet available on request.

**2.3 Other hazards**

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (1999/45/EC)	Notes	Weight percent
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	269-919-4	68391-01-5	No data available	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)	Xn;R22 C;R34 N;R50		0.1-1
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	287-090-7	85409-23-0	No data available	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Aquatic Acute 1 (H400)	Xn;R21/22 C;R34 N;R50		0.1-1

\* Polymer.

For the full text of the R, H and EUH phrases mentioned in this Section, see Section 16.

**Mr Muscle Multi Surface**

Workplace exposure limit(s), if available, are listed in subsection 8.1.

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.

[3] Exempted: Annex V of Regulation (EC) No 1907/2006.

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

<b>Inhalation</b>	Get medical attention or advice if you feel unwell.
<b>Skin contact:</b>	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.
<b>Ingestion:</b>	Rinse mouth. Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.
<b>Self-protection of first aider:</b>	Consider personal protective equipment as indicated in subsection 8.2.

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

<b>Inhalation:</b>	No known effects or symptoms in normal use.
<b>Skin contact:</b>	No known effects or symptoms in normal use.
<b>Eye contact:</b>	No known effects or symptoms in normal use.
<b>Ingestion:</b>	No known effects or symptoms in normal use.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

**5.2 Special hazards arising from the substance or mixture**

No special hazards known.

**5.3 Advice for firefighters**

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

No special measures required.

**6.2 Environmental precautions**

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

**6.3 Methods and material for containment and cleaning up**

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

**6.4 Reference to other sections**

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Measures to prevent fire and explosions:**

No special precautions required.

**Measures required to protect the environment:**

For environmental exposure controls see subsection 8.2.

**Advices on general occupational hygiene:**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Sealed Air.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in accordance with local and national regulations. Keep only in original container.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

**7.3 Specific end use(s)**

No specific advice for end use available.

**SECTION 8: Exposure controls/personal protection**

## Mr Muscle Multi Surface

## 8.1 Control parameters

### Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

### DNEL/DMEL and PNEC values

#### Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available	No data available	No data available	No data available
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available	No data available	No data available	No data available

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available	No data available	No data available	No data available
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available	No data available	No data available	No data available

DNEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available	No data available	No data available	No data available
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available	No data available	No data available	No data available
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available	No data available	No data available	No data available
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available	No data available	No data available	No data available

### Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available	No data available	No data available	No data available
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m <sup>3</sup> )
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available	No data available	No data available	No data available
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available	No data available	No data available	No data available

## 8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2.

If available, please refer to the product information sheet for application and handling instructions.

Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

**Appropriate engineering controls:** Use only in well ventilated areas.  
**Appropriate organisational controls:** Avoid direct contact and/or splashes where possible. Train personnel.

## Mr Muscle Multi Surface

**Personal protective equipment****Eye / face protection:**

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

**Hand protection:**

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

**Body protection:**

No special requirements under normal use conditions.

**Respiratory protection:**

Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.

**Environmental exposure controls:**

No special requirements under normal use conditions.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Information in this section refers to the product, unless it is specifically stated that substance data is listed

**Method / remark**

**Physical State:** Liquid

**Colour:** Colourless

**Odour:** Slightly perfumed

**Odour threshold:** Not applicable

**pH:** ≈ 11 (neat)

**Melting point/freezing point (°C):** Not determined

**Initial boiling point and boiling range (°C):** Not determined

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available		
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available		

**Method / remark**

**Flash point (°C):** Not applicable.

**Sustained combustion:** Not determined

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Not determined

**Upper/lower flammability limit (%):** Not determined

Substance data, flammability or explosive limits, if available:

**Method / remark**

**Vapour pressure:** Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available		
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available		

**Method / remark**

**Vapour density:** Not determined

**Relative density:** 1.00 g/cm<sup>3</sup> (20 °C)

**Solubility in / Miscibility with Water:** Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available		
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

**Method / remark**

**Autoignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Viscosity:** Not determined

**Explosive properties:** Not explosive.

**Oxidising properties:** Not oxidising

**9.2 Other information**

**Surface tension (N/m):** Not determined

**Corrosion to metals:** Not corrosive

Substance data, dissociation constant, if available:

## Mr Muscle Multi Surface

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

**10.2 Chemical stability**

Stable under normal storage and use conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known under normal storage and use conditions.

**10.4 Conditions to avoid**

None known under normal storage and use conditions.

**10.5 Incompatible materials**

Reacts with acids.

**10.6 Hazardous decomposition products**

None known under normal storage and use conditions.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

No data is available on the mixture

Substance data, where relevant and available, are listed below.

**Acute toxicity**

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	LD <sub>50</sub>	304.5	Rat	Method not given	
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	LD <sub>50</sub>	304.5	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	LD <sub>50</sub>	930	Rat	Method not given	
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	LD <sub>50</sub>	930	Rat	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	LC <sub>50</sub>	0.054		Method not given	
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	LC <sub>50</sub>	0.054	Rat	Method not given	

**Irritation and corrosivity**

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			

**Sensitisation**

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)

## Mr Muscle Multi Surface

quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			

## Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			

## CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

## Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No evidence for genotoxicity, weight of evidence	Weight of evidence	No evidence for mutagenicity	Weight of evidence
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available		No data available	

## Carcinogenicity

Ingredient(s)	Effect
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No evidence for carcinogenicity, weight-of-evidence
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No evidence for carcinogenicity, weight-of-evidence

## Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides			No data available				
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides			No data available				

## Repeated dose toxicity

## Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				

## Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				

## Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				

## Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides			No data available					
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides			No data available					

## STOT-single exposure

Ingredient(s)	Affected organ(s)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	Not applicable
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	Not applicable

## Mr Muscle Multi Surface

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	Not applicable
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	Not applicable

**Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

**Potential adverse health effects and symptoms**

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

**SECTION 12: Ecological information****12.1 Toxicity**

No data is available on the mixture.

Substance data, where relevant and available, are listed below

**Aquatic short-term toxicity**

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	EC <sub>50</sub>	0.016	<i>Daphnia</i>	Method not given	

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available			
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available			

**Aquatic long-term toxicity**

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				

## Mr Muscle Multi Surface

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
quatarnary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides		No data available				
quatarnary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides		No data available				

**Terrestrial toxicity**

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

**12.2 Persistence and degradability****Abiotic degradation**

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

**Biodegradation**

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT <sub>50</sub>	Method	Evaluation
quatarnary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides				Method not given	Readily biodegradable
quatarnary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides					Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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.

**12.3 Bioaccumulative potential**

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
quatarnary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	3.91	Method not given		
quatarnary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
quatarnary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	182.8		Method not given		
quatarnary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available				

**12.4 Mobility in soil**

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
quatarnary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	No data available				
quatarnary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides	No data available				

**12.5 Results of PBT and vPvB assessment**

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

**12.6 Other adverse effects**

No other adverse effects known.



## Mr Muscle Multi Surface

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Waste from residues / unused products:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

**European Waste Catalogue:**

20 01 30 - detergents other than those mentioned in 20 01 29.

**Empty packaging****Recommendation:**

Dispose of observing national or local regulations.

**Suitable cleaning agents:**

Water, if necessary with cleaning agent.

**SECTION 14: Transport information****ADR, RID, ADN, IMO/IMDG, ICAO/IATA**

**14.1 UN number:** Non-dangerous goods

**14.2 UN proper shipping name:** Non-dangerous goods

**14.3 Transport hazard class(es):** Non-dangerous goods

**Class:** -

**14.4 Packing group:** Non-dangerous goods

**14.5 Environmental hazards:** Non-dangerous goods

**14.6 Special precautions for user:** Non-dangerous goods

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** The product is not transported in bulk tankers.

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII):** Not applicable.

**Ingredients according to EC Detergents Regulation 648/2004**

non-ionic surfactants, cationic surfactants  
perfumes, Limonene

< 5%

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out on the mixture

**SECTION 16: Other information**

*The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract*

**SDS code:** MSDS4517

**Version:** 08.0

**Revision:** 2015-06-03

**Reason for revision:**

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 3, 15

**Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

**Full text of the R, H and EUH phrases mentioned in section 3:**

- H302 - Harmful if swallowed.
- H312 - Harmful in contact with skin.
- H314 - Causes severe skin burns and eye damage.
- H400 - Very toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.
- R21 - Harmful in contact with skin.
- R22 - Harmful if swallowed.
- R34 - Causes burns.
- R50 - Very toxic to aquatic organisms.

**Abbreviations and acronyms:**

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

**Mr Muscle Multi Surface**

**End of Safety Data Sheet**