

Mr Muscle(*) Washroom Cleaner

Revision: 2012-11-23

Version 04

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

1.1 Product identifier

Trade name: Mr Muscle(*) Washroom Cleaner

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

Identified uses:

For professional use only

AISE-P305 - Sanitary cleaner. Manual process

AISE-P306 - Sanitary cleaner. Spray and wipe manual process

AISE-P314 - Surface disinfectant. Manual process

AISE-P315 - Surface disinfectant. Spray and rinse 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 Ltd

Contact details

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 has been classified and labelled in accordance with Directive 1999/45/EC and corresponding national legislation.

Indication of danger

Xi - Irritant

Risk phrases:

R36 - Irritating to eyes.

2.2 Label elements



Xi - Irritant

Risk phrases:

R36 - Irritating to eyes.

Safety phrases:

S23d - Do not breathe spray.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S51 - Use only in well-ventilated areas.

Further indications on the label:

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

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

Mr Muscle(*) Washroom Cleaner

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (EC) 1272/2008	Notes	Weight percent
alkyl alcohol ethoxylate	Polymer*	68439-46-3	[4]	Xn; R22-41	Eye Dam. 1 (H318) Acute Tox. 4 (H302)		3-10
l-(+)-lactic acid	201-196-2	79-33-4	01-2119474164-39	Xi; R38-41	Eye Dam. 1 (H318) Skin Irrit. 2 (H315)		1-3

* Polymer.

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

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

Inhalation

Remove from source of exposure. Get medical attention.

Skin contact

Not required under normal use. Rinse with plenty of water. If irritation develops get medical attention.

Eye contact

Wash off immediately with plenty of water. Get medical attention.

Ingestion

Remove material from mouth. Immediately drink 1-2 glasses of water or milk. Get medical attention.

Self-protection of first aider:

Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation

Causes irritation.

Skin contact

Unlikely to be irritant in normal use.

Eye contact

Causes irritation.

Ingestion

Causes irritation.

Sensitisation

No known effects.

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

Advice on safe handling

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Handle in accordance with good industrial hygiene and safety practice. Do not mix with other products unless advised by Diversey. Use only with adequate ventilation. Avoid formation of aerosol. For advice on general occupational hygiene see subsection 8.2. For environmental exposure controls see subsection 8.2. For incompatible materials see subsection 10.5.

Prevention of fire and explosion

No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage rooms / facilities:**

In accordance with local and national regulations.

Combined storage in storage rooms / facilities:

In accordance with local and national regulations. Store away from products containing chlorine-based bleaching agents or sulphites.

Basic storage conditions

Store in original container. Keep container tightly closed. For conditions to avoid see subsection 10.4.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection**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
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
I-(+)-lactic acid	No data available	35.4	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)
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
I-(+)-lactic acid	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)
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
I-(+)-lactic acid	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
I-(+)-lactic acid	592	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
I-(+)-lactic acid	296	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)
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
I-(+)-lactic acid	1.3	No data available	No data available	10

Environmental exposure - PNEC, continued

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Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
alkyl alcohol ethoxylate	No data available	No data available	No data available	No data available
l-(+)-lactic acid	No data available	No data available	No data available	No data available

8.2 Exposure controls**General health and safety measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at the end of workday. Do not breathe gases, vapour, spray or aerosols. Use only in well-ventilated areas. Avoid contact with eyes.

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.

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: Yellow

Odour: Slightly perfumed

Odour threshold: Not applicable.

pH: > 2 (neat)

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

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

Flash point (°C): Not applicable.

Sustained combustion: Not determined

Evaporation rate: Not determined

Flammability (solid, gas): Not determined

Upper/lower flammability limit (%): Not determined

Vapour pressure: Not determined

Vapour density: Not determined

Relative density: Not determined

Solubility in / Miscibility with Water: Fully miscible

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

(according to IMDG/ADR regulation): Not determined

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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

Keep away from products containing chlorine-based bleaching agents or sulphites. Reacts with alkali.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

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

No test 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)
alkyl alcohol ethoxylate	LD ₅₀	> 2000	Rat	Method not given	
l-(+)-lactic acid	LD ₅₀	1810		Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LD ₅₀	> 2000	Rabbit	Method not given	
l-(+)-lactic acid	LD ₅₀	> 2000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate		No data available			
l-(+)-lactic acid	LC ₅₀	> 7.94	Rat	Method not given	4

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
l-(+)-lactic acid	Irritant		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
l-(+)-lactic acid	Severe damage		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
l-(+)-lactic acid	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	

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I-(+)-lactic acid	No data available			
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Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
I-(+)-lactic acid	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
alkyl alcohol ethoxylate		No data available				
I-(+)-lactic acid		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
alkyl alcohol ethoxylate	NOAEL	80		OECD 411 (EU B.28)		
I-(+)-lactic acid		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
alkyl alcohol ethoxylate		No data available				
I-(+)-lactic acid		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
alkyl alcohol ethoxylate		NOAEL	80		Method not given			
I-(+)-lactic acid			No data available					

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mixture data:

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

Substance data, where relevant and available

Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol ethoxylate	No evidence for carcinogenicity, negative test results
I-(+)-lactic acid	No data available

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
alkyl alcohol ethoxylate	No evidence for mutagenicity, negative test results		No data available	
I-(+)-lactic acid	No data available		No data available	

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
alkyl alcohol ethoxylate	NOAEL		> 250	Rat			
I-(+)-lactic acid			No data available				

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

Mixtures

No test data is available on the mixture.

Substance data, where relevant and available, are listed below

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Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LC ₅₀	5 - 7	Fish	(EC) 440/2008, C.1	96
l-(+)-lactic acid	LC ₅₀	130	Oncorhynchus mykiss	Method not given	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC ₅₀	5.3	Daphnia magna Straus	92/69/EEC	48
l-(+)-lactic acid	EC ₅₀	130	Daphnia magna Straus	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC ₅₀	1.4 - 47	Not specified	92/69/EEC	72
l-(+)-lactic acid	EC ₅₀	2800	Pseudokirchneriella subcapitata	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol ethoxylate		No data available			
l-(+)-lactic acid		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC ₅₀	> 140	Bacteria	Method not given	
l-(+)-lactic acid	EC ₅₀	> 100	Activated sludge	Method not given	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate	EC ₁₀	8983	Not specified	Method not given	21 day(s)	
l-(+)-lactic acid		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		2579	Daphnia magna	Method not given	21 day(s)	
l-(+)-lactic acid		No data available				

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

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Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
alkyl alcohol ethoxylate					Readily biodegradable
l-(+)-lactic acid				Method not given	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 potentialPartition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	3.11 - 4.19			
l-(+)-lactic acid	No data available		Not relevant, does not bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol ethoxylate	< 500				
l-(+)-lactic acid	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
alkyl alcohol ethoxylate	No data available				
l-(+)-lactic acid	No data available				Low potential for adsorption to soil

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.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Waste from residues / unused products Dispose of in compliance with all Federal, state, provincial, and local laws and regulations.
European Waste Catalogue: 20 01 29* - detergents containing dangerous substances.

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**

Mr Muscle(*) Washroom Cleaner**Ingredients according to EC Detergents Regulation 648/2004**

non-ionic surfactants < 5%
disinfectants, perfumes, Limonene

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

() This brand is used under authority from SC Johnson & Son Inc. Racine, Wisconsin, USA*

MSDS code: MSDS4486

Version 04

Revision: 2012-11-23

Reason for revision:

Overall design adjusted in accordance with Regulation (EC) No 1907/2006, Annex II

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

- R41 - Risk of serious damage to eyes.
- R22 - Harmful if swallowed.
- R38 - Irritating to skin.
- R36 - Irritating to eyes.
- H302 - Harmful if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.

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

End of Safety Data Sheet