

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Mr Muscle Window & Glass

Revision: 2017-09-09 Version: 06.1

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

1.1 Product identifier

Trade name: Mr Muscle Window & Glass

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-P312 - Glass cleaner. Manual process

AISE-P313 - Glass 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

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@diversey.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

Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)

2.2 Label elements



Signal word: Warning

Hazard statements:

H315 + H319 - Causes skin and serious eye irritation.

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 | Notes | Weight percent |
|-------------------|-----------|------------|-------------------|---|-------|----------------|
| 2-hexyloxyethanol | 203-951-1 | 112-25-4 | No data available | Skin Corr. 1B (H314) Acute Tox. 4 (H302) | | 1-3 |
| | | | | Acute Tox. 4 (H312) | | ı |

^{*} Polymer.

For the full text of the 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: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. Take off immediately all contaminated

clothing and wash it before re-use. If skin irritation occurs: Get medical advice or attention.

Eye contact: Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.

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: No known effects or symptoms in normal use.

Skin contact: Causes irritation.

Eye contact: Causes severe irritation.

Ingestion: 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 adviced by Diversey. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Use personal protective equipment as required. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

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

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

| Ingredient(s) | | Short term - Local effects | | | Long term - Systemic effects |
|---------------|-------------------|----------------------------|-------------------|-------------------|------------------------------|
| | 2-hexyloxyethanol | 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) |
|-------------------|----------------------------|--|---------------------------|---|
| 2-hexyloxyethanol | No data available | No data available | No data available | No data available |

DNFL 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) | |
|-------------------|----------------------------|--|---------------------------|---|--|
| 2-hexyloxyethanol | 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 | |
|-------------------|----------------------------|-------------------------------|---------------------------|------------------------------|--|
| 2-hexyloxyethanol | No data available | 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 |
|-------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| 2-hexyloxyethanol | No data available | No data available | No data available | No data available |

Environmental exposure

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|-------------------|-----------------------------|------------------------------|---------------------|-------------------------------|
| 2-hexyloxyethanol | 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/m³) |
|-------------------|------------------------------|-----------------------------|-------------------|-------------------|
| 2-hexyloxyethanol | 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 of the Safety Data Sheet. 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: Provide a good standard of general ventilation.

Avoid direct contact and/or splashes where possible. Train personnel. Appropriate organisational controls:

Personal protective equipment

Hand protection:

Safety glasses are not normally required. However, their use is recommended in those cases Eye / face protection:

where splashes may occur when handling the product (EN 166). Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: >= 480 min

Material thickness: >= 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: >= 30

min Material thickness: >= 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may

be chosen.

No special requirements under normal use conditions. **Body protection:**

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: Green

Odour: Slightly perfumed Odour threshold: Not applicable

pH: < 7 (neat)

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

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

Not relevant to classification of this product

UN Manual of Tests and Criteria, section 32, L.2

Substance data, boiling point

Flash point (°C): ≈ 56

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|-------------------|-------------------|--------|----------------------------|
| 2-hexyloxyethanol | No data available | | |

Method / remark

closed cup

Sustained combustion: The product does not sustain combustion

(UN Manual of Tests and Criteria, section 32, L.2)

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) |
|-------------------|-------------------|--------|---------------------|
| 2-hexyloxyethanol | No data available | | |

Method / remark

Vapour density: Not determined Relative density: Not determined

Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|-------------------|-------------------|--------|---------------------|
| 2-hexyloxyethanol | 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 applicable.

Viscosity: Not determined

Explosive properties: Not explosive. Vapours may form explosive mixtures with air.

Oxidising properties: Not oxidising.

9.2 Other information

Surface tension (N/m): Not determined Not relevant to classification of this product Corrosion to metals: Not corrosive

Substance data, dissociation constant, if available:

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

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000 ATE - Dermal (mg/kg): >2000

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) |
| 2-hexyloxyethanol | | No data | | | |
| | | available | | | |

| Acute dermal toxicity | | | | | |
|-----------------------|----------|-----------|---------|--------|----------|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure |
| | | (mg/kg) | , | | time (h) |
| 2-hexyloxyethanol | | No data | | | |
| | | available | | i | |

| Acute inhalative toxicity | | | | | |
|---------------------------|----------|-----------------|---------|--------|-------------------|
| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
| 2-hexyloxyethanol | | No data | | | |

Irritation and corrosivity

Skin irritation and corrosivit

| OKIT ITHATION AND CONTOSIVITY | | | | |
|-------------------------------|-------------------|---------|--------|---------------|
| Ingredient(s) | Result | Species | Method | Exposure time |
| 2-hexyloxyethanol | No data available | | | |

Eye irritation and corrosivity

| | Ingredient(s) | Result | Species | Method | Exposure time |
|---|-------------------|-------------------|---------|--------|---------------|
| ſ | 2-hexyloxyethanol | No data available | | | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|-------------------|-------------------|---------|--------|---------------|
| 2-hexyloxyethanol | No data available | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|-------------------|-------------------|---------|--------|-------------------|
| 2-hexyloxyethanol | No data available | | | |

Sensitisation by inhalation

| Ingredient(s) | | Result | Species | Method | Exposure time |
|---------------|-------------------|-------------------|---------|--------|---------------|
| | 2-hexyloxyethanol | No data available | | | |

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenici

| IVI | utagenicity | | | | |
|-----|-------------------|-------------------|------------|-------------------|-----------|
| | Ingredient(s) | Result (in-vitro) | | Result (in-vivo) | Method |
| | | | (in-vitro) | | (in-vivo) |
| Г | 2-hexyloxyethanol | No data available | | No data available | |

Carcinogenicity

| Ingredient(s) | Effect |
|-------------------|-------------------|
| 2-hexyloxyethanol | 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 |
|-------------------|----------|-----------------|-----------------------|---------|--------|---------------|------------------------------------|
| 2-hexyloxyethanol | | | No data available | | | | - |

Repeated dose toxicity

| Sub-acute of Sub-chiloffic oral toxicity | | | | | | |
|--|----------|--------------|---------|--------|-------------|-----------------------------|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Specific effects and organs |
| | | (mg/kg bw/d) | | | time (days) | affected |
| 2-hexyloxyethanol | | No data | | | | |
| | | available | | | | |

Sub-chronic dermal toxicity

| cas chieffic definial textory | | | | | | |
|-------------------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
| 2-hexyloxyethanol | | 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 |
|-------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| 2-hexyloxyethanol | | 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 |
|-------------------|----------------|----------|-----------------------|---------|--------|---------------|---|--------|
| 2-hexyloxyethanol | | | No data | | | | | |
| | | | available | | | | | |

STOT-single exposure

| e i e i igio expectare | |
|------------------------|-------------------|
| Ingredient(s) | Affected organ(s) |
| 2-hexyloxyethanol | No data available |

| STOT-repeated exposure | |
|------------------------|-------------------|
| Ingredient(s) | Affected organ(s) |
| 2-hexyloxyethanol | No data available |

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) |
|-------------------|----------|-----------------|---------|--------|-------------------|
| 2-hexyloxyethanol | | No data | | | |
| | | available | | | |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|-------------------|----------|-----------------|---------|--------|-------------------|
| 2-hexyloxyethanol | | No data | | | |
| | | available | | | |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|-------------------|----------|-----------------|---------|--------|-------------------|
| 2-hexyloxyethanol | | No data | | | |
| | | available | | | |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|-------------------|----------|----------------------|---------|--------|----------------------|
| 2-hexyloxyethanol | | No data available | | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|-------------------|----------|----------------------|----------|--------|---------------|
| 2-hexyloxyethanol | | No data available | | | |

Aquatic long-term toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|-------------------|----------|-----------------|---------|--------|---------------|------------------|
| 2-hexyloxyethanol | | No data | | | | |
| | | available | | | | |

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|-------------------|----------|----------------------|---------|--------|---------------|------------------|
| 2-hexyloxyethanol | | No data available | | | | |

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 |
|-------------------|----------|---------------------------------|---------|--------|----------------------|------------------|
| 2-hexyloxyethanol | | 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 50 | Method | Evaluation |
|-------------------|----------|-------------------|-------|--------|-------------------|
| 2-hexyloxyethanol | | | | | No data available |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|-------------------|-------------------|--------|------------|--------|
| 2-hexyloxyethanol | No data available | | | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|-------------------|-------------------|---------|--------|------------|--------|
| 2-hexyloxyethanol | No data available | | | | |

12.4 Mobility in soil

| Ingredient(s) | Adsorption coefficient Log Koc | Desorption coefficient Log Koc(des) | Method | Soil/sediment type | Evaluation |
|-------------------|--------------------------------------|---|--------|-----------------------|------------|
| 2-hexyloxyethanol | 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.

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

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

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 and the IBC Code: Non-dangerous goods

SECTION 15: Regulatory information

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

EU regulations:

- Regulation (EC) No 1272/2008 CLP
- · Regulation (EC) No. 1907/2006 REACH
- Regulation (EC) No. 648/2004 Detergents regulation

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

Ingredients according to EC Detergents Regulation 648/2004

anionic surfactants

perfumes

< 5%

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.

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: MSDS4350 Version: 06.1 Revision: 2017-09-09

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 2, 3, 16

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 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.

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

End of Safety Data Sheet