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global hygiene solutions

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A Coventry Group Company

SAFETY DATA SHEET
REFRESH MOULD, MILDEW AND GROUT CLEANER
Compiled in Accordance with EU and GB REACH and CLP Regulations.

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

1.1. Product identifier

Product name REFRESH MOULD, MILDEW AND GROUT CLEANER

Product number 800-301-0503

Container size 750mL

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

Identified uses Cleaning agent. Disinfectant.

Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier
MIRIUS ™
A Coventry Group Company
Coventry Chemicals Limited, Woodhams Road, Siskin Drive, Coventry, England, CV3 4FX
Coventry Chemicals (Ireland) Limited, 4th Floor 8-34 Percy Place, Dublin, D04 P5K3, Ireland.
+44 (0)2476639739
www.mirius.com
info@mirius.com

Contact person For content of safety data sheet:, sds@mirius.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1865407333 (Strictly for emergencies only: incidents involving damage to human health and/or the environment)

National emergency telephone number
UK:
In case of a medical emergency following exposure to a chemical call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 Ireland: For information or to report a poisoning incident contact The National Poisons Information Centre (01 8092166)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified

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

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms

REFRESH MOULD, MILDEW AND GROUT CLEANER

Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P102 Keep out of reach of children. P101 If medical advice is needed, have product container or label at hand. P273 Avoid release to the environment. 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. P310 Immediately call a POISON CENTER/ doctor. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).
Biocide Labelling	This product contains substances with biocidal properties., Contains active substance: Sodium Hypochlorite, 0.95%, Read attached instructions before use.
Detergent labelling	< 5% anionic surfactants, < 5% chlorine-based bleaching agents, < 5% perfumes, < 5% polycarboxylates
Supplementary precautionary statements	P103 Read label before use. P264 Wash contaminated skin thoroughly after handling. P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P391 Collect spillage.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. This product is not classified as, nor contains substances classed as having endocrine disrupting characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605). The mixture does not contain substances classified as ‘Substances of Very High Concern' (SVHC) >0.1% published by the European Chemicals Agency (ECHA) under article 57 of the REACH regulation (as amended).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SODIUM HYPOCHLORITE **1.0%**

CAS number: 7681-52-9 EC number: 231-668-3

M factor (Acute) = 10 M factor (Chronic) = 1

Classification

Ox. Liq. 2 - H272
Met. Corr. 1 - H290
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

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

SECTION 4: First aid measures

4.1. Description of first aid measures

REFRESH MOULD, MILDEW AND GROUT CLEANER

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

Ingestion Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Skin contact Remove contaminated clothing. Get medical attention if irritation persists after washing. Rinse immediately with plenty of water.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel. Rinse immediately with plenty of water.

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

Inhalation The product is considered to be a low hazard under normal conditions of use. Spray/mists may cause respiratory tract irritation.

Ingestion This product is strongly irritating. May cause stomach pain or vomiting. May cause discomfort if swallowed.

Skin contact The liquid is irritating to eyes and skin. Symptoms following overexposure may include the following: Irritation. Redness. Dryness and/or cracking.

Eye contact The product is irritating to eyes and skin. A single exposure may cause the following adverse effects: Severe irritation, burning, tearing and blurred vision.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

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. Foam, carbon dioxide or dry powder.

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

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Chlorine. Hydrogen chloride (HCl). Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting 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 appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. For personal protection, see Section 8. Avoid breathing spray.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground.

REFRESH MOULD, MILDEW AND GROUT CLEANER

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Absorb spillage with non-combustible, absorbent material. Do not discharge into drains or watercourses or onto the ground. Absorb in vermiculite, dry sand or earth and place into containers. Do not use sawdust or other combustible material. Provide adequate ventilation. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Small Spillages: Flush away spillage with plenty of water.

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 Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Do not mix with other household chemical products. Do not mix with acid.

Advice on general occupational hygiene Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. Wash contaminated clothing before reuse. Use appropriate skin cream to prevent drying of skin.

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. Protect from light. Store away from the following materials: Acids. Store at temperatures between 5°C and 25°C. Keep out of the reach of children.

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

SODIUM HYPOCHLORITE

Short-term exposure limit (15-minute): WEL 0.5 ppm 1.5 mg/m³
WEL = Workplace Exposure Limit.

SODIUM HYPOCHLORITE (CAS: 7681-52-9)

DNEL

Industry - Inhalation; Long term local effects: 1.55 mg/m³
Industry - Inhalation; Long term systemic effects: 1.55 mg/m³
Industry - Inhalation; Short term local effects: 3.1 mg/m³
Industry - Inhalation; Short term systemic effects: 3.1 mg/m³
Consumer - Inhalation; Long term local effects: 1.55 mg/m³
Consumer - Inhalation; Long term systemic effects: 1.55 mg/m³
Consumer - Inhalation; Short term local effects: 3.1 mg/m³
Consumer - Inhalation; Short term systemic effects: 3.1 mg/m³
Consumer - Oral; Long term systemic effects: 0.26 mg/kg/day

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PNEC	- Fresh water; 0.00021 mg/l - marine water; 0.000042 mg/l - Intermittent release; 0.00026 mg/l - STP; 4.69 mg/l - ;

C12-14-ALKYL ETHER SULFATES (CAS: 68891-38-3)

DNEL	Workers - Inhalation; Long term systemic effects: 175 mg/m³ Workers - Dermal; Long term systemic effects: 2750 mg/kg/day Consumer - Inhalation; Long term systemic effects: 52 mg/m³ Consumer - Dermal; Long term systemic effects: 1650 mg/kg/day Consumer - Oral; Long term systemic effects: 15 mg/kg/day
PNEC	- Fresh water; 0.24 mg/l - marine water; 0.024 mg/l - Intermittent release; 0.071 mg/l - Sediment, Fresh water; 0.917 mg/kg - Sediment, marine water; 0.092 mg/kg - Soil; 7.5 mg/kg - STP; 10,000 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment that provides appropriate eye and face protection should be worn.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex). To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. A break through time of >60 minutes is suggested. Gloves should be inspected regularly for damage.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact. Use appropriate skin cream to prevent drying of skin.
Hygiene measures	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. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	Respiratory protection not required.
Environmental exposure controls	Avoid releasing into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

REFRESH MOULD, MILDEW AND GROUT CLEANER

Appearance	Liquid.
Colour	Colourless to pale yellow.
Odour	Mild. Chlorine.
Odour threshold	Not available.
pH	pH (concentrated solution): >11
Melting point	Not determined.
Initial boiling point and range	No information available.
Flash point	This product does not sustain combustion.
Evaporation rate	No information available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Relative density	1.026 @ 20°C
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	Not relevant.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Acids. Alkalis. Oxidising materials.

10.2. Chemical stability

Stability	Decomposes over time. Factors that increase the rate of decomposition: increase in temperature, certain metallic impurities, high initial concentration, fall in pH below 11and exposure to light.

10.3. Possibility of hazardous reactions

REFRESH MOULD, MILDEW AND GROUT CLEANER

Possibility of hazardous reactions Generates toxic gas in contact with acid. Chlorine.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Acids. Ammonia. Organic compounds. Some metals. Nickel. Iron. Copper.

10.6. Hazardous decomposition products

Hazardous decomposition products Chlorine. Hydrogen chloride (HCl). Oxides of the following substances: Chlorine. Hypochlorous acid. Sodium chlorate

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Information given is based on data of the components and of similar products.

Other health effects Does not contain any substances known to be carcinogenic.

Acute toxicity - oral

Notes (oral LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin. On basis of test data.

Serious eye damage/irritation

Serious eye damage/irritation Causes eye irritation. On basis of test data.

Respiratory sensitisation

Respiratory sensitisation Not sensitising. Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Not classified. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

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

Specific target organ toxicity - repeated exposure

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

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

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Ingestion	May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.
Skin contact	Liquid may irritate skin. Prolonged or repeated exposure may cause the following adverse effects: Redness. Dryness and/or cracking. Irritation.
Eye contact	May cause temporary eye irritation.

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties	This product is not classified as, nor contains substances classed as having endocrine disrupting characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605).
11.2.2 Other information	None known

Toxicological information on ingredients.

SODIUM HYPOCHLORITE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	8,910.0
Species	Rat
Notes (oral LD_{50})	REACH dossier information.
ATE oral (mg/kg)	8,910.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,001.0
Species	Rabbit
ATE dermal (mg/kg)	2,001.0

Skin corrosion/irritation

Animal data	Corrosive to skin. REACH dossier information. Dose: LD50 = 20g/kg bw, 2 days, Rabbit

Serious eye damage/irritation

Serious eye damage/irritation	Corrosivity to eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation	Not sensitising.

Skin sensitisation

Skin sensitisation	Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vivo	REACH dossier information. Negative.

Carcinogenicity

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

Reproductive toxicity

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Reproductive toxicity - fertility	REACH dossier information. No evidence of reproductive toxicity in animal studies.

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

12.1. Toxicity

Toxicity The product contains a substance which is harmful to aquatic organisms.

Ecological information on ingredients.

SODIUM HYPOCHLORITE

Acute aquatic toxicity

LE(C)$_{50}$	0.01 < L(E)C50 ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	EC_{50}, 96 hours: 0.01-0.1 mg/l,
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 0.01-0.1 mg/l, Daphnia magna
Acute toxicity - microorganisms	LOEC, : 0.375 mg/l, Activated sludge

Chronic aquatic toxicity

NOEC	0.001 < NOEC ≤ 0.01
Degradability	Rapidly degradable
M factor (Chronic)	1

12.2. Persistence and degradability

Persistence and degradability The product contains inorganic substances which are not biodegradable. May accumulate in soil and sediment. Substantially removed in biological treatment processes. The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in The Detergents Regulations (as amended).

Ecological information on ingredients.

SODIUM HYPOCHLORITE

Stability (hydrolysis)	Water - Half-life 10% NaoCL: 220 days @ 25°C - Half-life 5% NaOCL: 790 days @ 25°C REACH dossier information.
Biodegradation	The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

REFRESH MOULD, MILDEW AND GROUT CLEANER

SODIUM HYPOCHLORITE

Bioaccumulative potential Low potential for bioaccumulation.

Partition coefficient log Kow: -3.4174 REACH dossier information.

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems.

Ecological information on ingredients.

SODIUM HYPOCHLORITE

Henry's law constant 0.076 @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product is not classified as, nor contains substances classed as having endocrine disrupting characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605).

Ecological information on ingredients.

SODIUM HYPOCHLORITE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects There is evidence that sodium hypochlorite inhibits the aerobic treatment process at a concentration of 0.05 mg/l.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered.

Disposal methods The generation of waste should be minimised or avoided wherever possible. Dispose of waste product or used containers in accordance with local regulations The packaging must be empty (drop-free when inverted).

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.

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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 MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). EH40/2005 Workplace exposure limits. GB (UK) CLP and REACH Regulations. The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (as amended). The Detergents (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/672); Detergents (Safeguarding) (Amendment) (EU Exit) Regulations 2019 (S.I. 2019/671); Detergents (Amendment) (EU Exit) Regulations 2020 (S.I. 2020-1617) - as amended
EU legislation	European Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (as amended) European Regulation (EC) No 1907/2006 - Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended) European Regulation (EC) No 648/2004 on detergents (as amended)
Guidance	COSHH Essentials. ECHA Guidance on the Application of the CLP Criteria. ECHA Guidance on the compilation of safety data sheets.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out. Sodium hypochlorite. and Sodium hydroxide.

SECTION 16: Other information

REFRESH MOULD, MILDEW AND GROUT CLEANER

Abbreviations and acronyms used in the safety data sheet	PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. PNEC: Predicted No Effect Concentration. DNEL: Derived No Effect Level.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision. New revision number applied to comply with Commission Regulation (EU) No 2015/830 Of 28 May 2015' Note: Finished product SDS take their revision history from the parent bulk liquid SDS. The revision data will show that of the parent liquid. Review of SDS with no change of classification. Revised formulation.
Revision date	17/05/2023
Revision	4
Supersedes date	23/12/2022
SDS number	21615
Hazard statements in full	H272 May intensify fire; oxidiser. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.