



mirius™
A Coventry Group Company

SAFETY DATA SHEET

5L REFRESH GENERAL PURPOSE DETERGENT

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

1.1. Product identifier

Product name	5L REFRESH GENERAL PURPOSE DETERGENT
Product number	800-306-0100
Container size	5L

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

Identified uses	Detergent.
Uses advised against	Not for Oral Consumption. Use only for intended applications. Do not use for personal cleansing.

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: National Poisons Information Centre Beaumont Hospital Tel: 01 809 2166 (8:00 a.m. to 10.00 p.m. 7 days a week) Tel: 01 809 2566 (health care professionals)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319
Environmental hazards	Aquatic Chronic 3 - H412

2.2. Label elements

5L REFRESH GENERAL PURPOSE DETERGENT

Hazard pictograms



Signal word

Warning

Hazard statements

H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P264 Wash hands thoroughly after handling.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P501 Dispose of contents/ container in accordance with local regulations.

Contains

C12-14-ALKYL ETHER SULFATES

Detergent labelling

5 - < 15% anionic surfactants, Contains 2-Bromo-2-nitropropane-1, 3-diol

Supplementary precautionary statements

P103 Read label before use.
P280 Wear protective gloves, eye and face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P332+P313 If skin irritation occurs: Get medical advice/ attention.

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).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

C12-14-ALKYL ETHER SULFATES	5-10%
CAS number: 68891-38-3	EC number: 500-234-8
Classification	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
Aquatic Chronic 3 - H412	

5L REFRESH GENERAL PURPOSE DETERGENT

BRONOPOL (INN)	<1%
CAS number: 52-51-7	EC number: 200-143-0
M factor (Acute) = 10	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H335 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411	Classification (67/548/EEC or 1999/45/EC) Xn;R21/22 Xi;R37/38,R41 N;R50

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

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Rinse immediately with plenty of water. Remove contaminated clothing. Get medical attention if irritation persists after washing.
Eye contact	Rinse immediately with plenty of water. 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.

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

Inhalation	Considered to be a low inhalation hazard at normal workplace temperatures.
Ingestion	Unlikely exposure route without abuse. Symptoms will include, Sickness, possible Irritation of GI Tract. A soapy taste may be reported.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause irritation. May cause temporary eye irritation.

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

Notes for the doctor	No specific recommendations.
-----------------------------	------------------------------

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.
-------------------------------------	---

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.
--------------------------------------	--

5.3. Advice for firefighters

Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses.
---	--

5L REFRESH GENERAL PURPOSE DETERGENT

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 For personal protection, see Section 8. In case of spills, beware of slippery floors and surfaces.

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.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

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 Provide adequate ventilation. Avoid contact with skin and eyes. Do not mix with other chemicals or detergents.

Advice on general occupational hygiene No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products. Wash at the end of each work shift and before eating, smoking and using the toilet.

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.

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

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

DNEL	Workers - Inhalation; Long term systemic effects: 175 mg/m ³ Workers - Dermal; Long term systemic effects: 2750 mg/kg/day Consumer - Inhalation; Long term systemic effects: 52 mg/m ³ 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

5L REFRESH GENERAL PURPOSE DETERGENT

BRONOPOL (INN) (CAS: 52-51-7)

DNEL	Workers - Inhalation; Long term systemic effects: 4.1 mg/m ³	
	Workers - Inhalation; Short term systemic effects: 12.3 mg/m ³	
	Workers - Inhalation; Long term local effects: 4.2 mg/m ³	
	Workers - Inhalation; Short term local effects: 4.2 mg/m ³	
	Workers - Dermal; Long term systemic effects: 2.3 mg/kg/day	
	Workers - Dermal; Short term systemic effects: 7 mg/kg/day	
	Workers - Dermal; Long term local effects: 0.013 mg/cm ²	
	Workers - Dermal; Short term local effects: 0.013 mg/cm ²	
	General population - Inhalation; Long term systemic effects: 1.2 mg/m ³	
	General population - Inhalation; Short term systemic effects: 3.7 mg/m ³	
	General population - Inhalation; Long term local effects: 1.3 mg/m ³	
	General population - Inhalation; Short term local effects: 1.3 mg/m ³	
	General population - Dermal; Long term systemic effects: 1.4 mg/kg/day	
	General population - Dermal; Short term systemic effects: 4.2 mg/kg/day	
	General population - Dermal; Long term local effects: 0.008 mg/cm ²	
	General population - Dermal; Short term local effects: 0.008 mg/cm ²	
	General population - Oral; Long term systemic effects: 0.35 mg/kg/day	
	General population - Oral; Short term systemic effects: 1.1 mg/kg/day	
	PNEC	- Fresh water; 0.01 mg/l
		- marine water; 0.008 mg/l
- Intermittent release; 0.0025 mg/l		
- STP; 0.43 mg/l		
- Sediment (Freshwater); 0.041 mg/kg		
- Sediment (Marinewater); 0.00328 mg/kg		
- Soil; 0.5 mg/kg		

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Personal protection

Data provided here is not a risk/COSHH assessment. It relates to the product as supplied and should be used in developing a risk/COSHH assessment.

Eye/face protection

No specific eye protection required during normal use. During the manufacture and filling of this product eye protection is recommended refer to EN166.

Hand protection

For users with sensitive skin, it is recommended that suitable protective gloves are worn.

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.

5L REFRESH GENERAL PURPOSE DETERGENT

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Green.
Odour	Unperfumed.
Odour threshold	Not determined.
pH	pH (concentrated solution): 6.5 - 8.5
Melting point	Not determined.
Initial boiling point and range	Not available.
Flash point	This product is not considered to be flammable.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not flammable. This product does not sustain combustion.
Upper/lower flammability or explosive limits	Product is not considered to be flammable nor explosive
Other flammability	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.020 - 1.040
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not technically possible for a mixture.
Auto-ignition temperature	Not determined.
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	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
Comments	Information given is applicable to the product as supplied.
9.2. Other information	
Other information	Not relevant.
Refractive index	11.0-13.0
Volatile organic compound	Not applicable.

SECTION 10: Stability and reactivity

5L REFRESH GENERAL PURPOSE DETERGENT

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

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.

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Based on available data the classification criteria are not met. May be slightly irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes eye irritation.

Respiratory sensitisation

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

Skin sensitisation

Skin sensitisation 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

5L REFRESH GENERAL PURPOSE DETERGENT

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.

General information This product has low toxicity.

Inhalation No specific health hazards known.

Ingestion May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.

Skin contact Liquid may irritate skin.

Eye contact May irritate eyes.

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.

C12-14-ALKYL ETHER SULFATES

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 4,100.0

Species Rat

ATE oral (mg/kg) 4,100.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,001.0

Species Rat

ATE dermal (mg/kg) 2,001.0

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish. When used as instructed, the product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Ecological information on ingredients.

C12-14-ALKYL ETHER SULFATES

Acute aquatic toxicity

5L REFRESH GENERAL PURPOSE DETERGENT

Acute toxicity - fish LC₅₀, 96 hours: 7.1 mg/l, Brachydanio rerio (Zebra Fish)
REACH dossier information.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 7.2 mg/l, Daphnia magna
REACH dossier information.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 28 days: 0.14 mg/l, Oncorhynchus mykiss (Rainbow trout)
REACH dossier information.

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.27 mg/l, Daphnia magna
REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in The Detergents Regulations (as amended).

Ecological information on ingredients.

C12-14-ALKYL ETHER SULFATES

Biodegradation Expected to be readily biodegradable.
Water - Degradation 100%: 28 days
REACH dossier information.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not technically possible for a mixture.

Ecological information on ingredients.

C12-14-ALKYL ETHER SULFATES

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: ~ 0.3 REACH dossier information.

12.4. Mobility in soil

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

Ecological information on ingredients.

C12-14-ALKYL ETHER SULFATES

Mobility The product is soluble in water.

Adsorption/desorption coefficient - Log Koc: 0.34 @ °F

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.

5L REFRESH GENERAL PURPOSE DETERGENT

C12-14-ALKYL ETHER SULFATES

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 None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The generation of waste should be minimised or avoided wherever possible.

Disposal methods The packaging must be empty (drop-free when inverted). Wash with plenty of water. Waste packaging should be collected for reuse or recycling. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Normal use solutions are expected to be flushed to sewers.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

5L REFRESH GENERAL PURPOSE DETERGENT

National regulations	<p>The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).</p> <p>EH40/2005 Workplace exposure limits.</p> <p>The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).</p> <p>The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No. 696) (as amended).</p> <p>The Detergents Regulations 2010 (SI 2010 No. 740) (as amended). The Detergents (Amendment) (EU Exit) Regulations 2019 (SI 2019 No. 612) (as amended). The Detergents (Safeguarding) (Amendment) (EU Exit) Regulations 2019 (SI 2019 No. 671) (as amended).</p> <p>The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).</p> <p>The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (as amended).</p> <p>The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).</p>
EU legislation	<p>European Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (as amended)</p> <p>European Regulation (EC) No 1907/2006 - Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended)</p> <p>European Regulation (EC) No 648/2004 on detergents (as amended)</p>
Guidance	<p>Workplace Exposure Limits EH40.</p> <p>COSHH Essentials.</p> <p>ECHA Guidance on the Application of the CLP Criteria.</p> <p>ECHA Guidance on the compilation of safety data sheets.</p>

15.2. Chemical safety assessment

Currently we do not have information from our suppliers about this.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
Revision comments	<p>Revised classification. Note: Finished product SDS take their revision history from the parent bulk liquid SDS. The revision data will show that of the parent liquid. NOTE: Lines within the margin indicate significant changes from the previous revision.</p>
Revision date	08/06/2023
Revision	7
Supersedes date	14/11/2022
SDS number	21621
Hazard statements in full	<p>H302 Harmful if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H315 Causes skin irritation.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H335 May cause respiratory irritation.</p> <p>H400 Very toxic to aquatic life.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>

5L REFRESH GENERAL PURPOSE DETERGENT

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.
----- END OF SDS -----