



SAFETY DATA SHEET

1Lt SUPER PROFESSIONAL ECO SELECT CONCENTRATED HARD SURFACE & FLOOR CLEANER ES4

Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

1.1. Product identifier

Product name 1Lt SUPER PROFESSIONAL ECO SELECT CONCENTRATED HARD SURFACE & FLOOR

CLEANER ES4

Product number 800-304-0022 ES4

Container size 1L

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

Identified uses Detergent.

1.3. Details of the supplier of the safety data sheet

Supplier Mirius™

A Coventry Group Company

Woodhams Road Siskin Drive Coventry CV3 4FX

Tel: +44 (0) 02476 639 739 Fax: +44 (0) 02476 639 717 Email: sales@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 In case of a medical emergency following exposure to a chemical call NHS Direct in England

number or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

Classification (67/548/EEC or -

1999/45/EC)

2.2. Label elements

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Pictogram



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.

Precautionary statements P280 Wear protective gloves/ protective clothing/ eye protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower.

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.

Contains DISODIUM METASILICATE, AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES, SODIUM

HYDROXIDE

Detergent labelling < 5% non-ionic surfactants, < 5% perfumes, < 5% polycarboxylates

Supplementary precautionary

statements

P260 Do not breathe vapour/ spray.

P264 Wash contaminated skin thoroughly after handling.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P321 Specific treatment (see medical advice on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DISODIUM METASILICATE 1-5%

C;R34 Xi;R37

CAS number: 6834-92-0 EC number: 229-912-9 REACH registration number: 01-

2119449811-37-XXXX

Classification Classification (67/548/EEC or 1999/45/EC)

Met. Corr. 1 - H290

Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335

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AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

1-5%

CAS number: 308062-28-4 EC number: 931-292-6 REACH registration number: 01-

2119490061-47-XXXX

M factor (Acute) = 1

Classification

Classification (67/548/EEC or 1999/45/EC)

Xn;R22. Xi;R38,R41. N;R50.

Acute Tox. 4 - H302 Skin Irrit. 2 - H315

Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

SODIUM HYDROXIDE

CAS number: 1310-73-2

<1%

EC number: 215-185-5 REACH registration number: 01-

2119457892-27-XXXX

Classification

Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318

BORNAN-2-ONE

<1%

CAS number: 76-22-2 EC number: 200-945-0 REACH registration number: 01-

2119966156-31-XXXX

Classification

Classification (67/548/EEC or 1999/45/EC)

Xn:R20.R68/22.

Flam. Sol. 1 - H228 Acute Tox. 4 - H302

Acute Tox. 4 - H332 STOT SE 2 - H371

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

General information Provide eyewash station.

Inhalation Remove affected person from source of contamination. Keep affected person warm and at

rest. Get medical attention immediately.

Ingestion Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse

mouth thoroughly with water. Get medical attention immediately.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash

skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after

washing.

Eye contact Remove affected person from source of contamination. Remove any contact lenses and open

eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention

immediately. Continue to rinse.

Protection of first aidersFirst aid personnel should wear appropriate protective equipment during any rescue.

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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

Inhalation May cause respiratory irritation. Coughing, chest tightness, feeling of chest pressure.

Ingestion Irritation. Sore throat. Dryness of mouth and throat.

Skin contact A single exposure may cause the following adverse effects: Redness. Irritation. Dry skin.

Eye contact The product is irritating to eyes and skin. Prolonged or repeated exposure may cause the

following adverse effects: Irritation and redness, followed by blurred vision. Corneal damage.

Risk of serious damage to eyes.

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

Notes for the doctor Treat symptomatically.

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.

Use foam, carbon dioxide, dry powder or water fog to extinguish.

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. Oxides of nitrogen. Oxides of carbon. Carbon dioxide (CO2). Carbon

monoxide (CO).

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 Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid or minimise the creation of any environmental contamination.

6.3. Methods and material for containment and cleaning up

Methods for cleaning upDo not touch or walk into spilled material. Stop leak if possible without risk. Absorb in

vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty

of water.

6.4. Reference to other sections

Reference to other sections For waste disposal, see Section 13. See Section 11 for additional information on health

hazards. See Section 1 for emergency contact information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Wear protective

clothing as described in Section 8 of this safety data sheet.

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Advice on general Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when occupational hygiene using this product. Wash promptly with soap and water if skin becomes contaminated. Take

off immediately all contaminated clothing and wash it before reuse.

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. Keep only in

the original container.

Storage class Corrosive storage.

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 HYDROXIDE

Short-term exposure limit (15-minute): WEL 2 mg/m³

BORNAN-2-ONE

Long-term exposure limit (8-hour TWA): WEL 2 ppm 13 mg/m3 Short-term exposure limit (15-minute): 3 ppm 19 mg/m³

WEL = Workplace Exposure Limit

AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES (CAS: 308062-28-4)

DNEL Workers - Inhalation; Long term systemic effects: 15.5 mg/m³

Workers - Dermal; Long term systemic effects: 11 mg/kg/day

General population - Inhalation; Long term systemic effects: 3.8 mg/m³ General population - Dermal; Long term systemic effects: 5.5 mg/kg/day General population - Oral; Long term systemic effects: 0.44 mg/kg/day

PNEC - Fresh water; 0.034 mg/l

- marine water; 0.003 mg/l

- STP; 24 mg/l

Sediment (Freshwater); 5.24 mg/kgSediment (Marinewater); 0.524 mg/kg

- Soil; 1.02 mg/kg

SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL Industry - Inhalation; Long term local effects: 1.0 mg/m³

Consumer - Inhalation; Long term local effects: 1.0 mg/m³

BORNAN-2-ONE (CAS: 76-22-2)

DNEL Workers - Inhalation; Long term systemic effects: 17.632 mg/m³

Workers - Dermal; Long term systemic effects: 10 mg/kg/day

General population - Inhalation; Long term systemic effects: 0.99 mg/m³ General population - Dermal; Long term systemic effects: 5 mg/kg/day General population - Oral; Long term systemic effects: 5 mg/kg/day

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PNEC Fresh water; 0.00171 mg/l

Intermittent release, Fresh water; 0.0171 mg/l

marine water; 0.000171 mg/l

Intermittent release, marine water; 0.00171 mg/l

STP; 1 mg/l

Sediment (Freshwater); 0.139 mg/kg Sediment (Marinewater); 0.0174 mg/kg

Soil; 0.01326 mg/kg

8.2. Exposure controls

Protective equipment





Appropriate engineering

controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational

exposure limits for the product or ingredients.

Eyewear complying with an approved standard should be worn if a risk assessment indicates Eye/face protection

eye contact is possible. The following protection should be worn: Chemical splash goggles or

face shield.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if

a risk assessment indicates skin contact is possible.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures Provide eyewash station and safety shower. Do not smoke in work area. Wash at the end of

each work shift and before eating, smoking and using the toilet. Promptly remove any clothing

that becomes contaminated. Wash promptly with soap and water if skin becomes

contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat,

drink or smoke.

Respiratory protection No specific recommendations. Respiratory protection may be required if excessive airborne

contamination occurs.

Environmental exposure

controls

Avoid releasing into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid. Colour Purple.

Odour Perfumed.

Odour threshold Not available.

pH (concentrated solution): >11.5 Hq

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.

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Flammability (solid, gas) Not applicable.

Upper/lower flammability or

No information available.

explosive limits

Vapour pressure No information available.

Relative density ~ 1.045 @ 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 under the influence

Not considered to be explosive.

of a flame

Comments Information given is applicable to the product as supplied.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Under normal conditions of storage and use, no hazardous reactions will occur.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

The following materials may react with the product: Strong oxidising agents. Strong mineral

acids. Strong alkalis.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid Avoid contact with oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition Thermal decomposition or combustion products may include the following substances:

products Carbon monoxide (CO). Carbon dioxide (CO2). Oxides of nitrogen.

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.

ATE oral (mg/kg) 70,933.33

Acute toxicity - dermal

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

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Acute toxicity - inhalation

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

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Extreme pH ≥ 11.5 Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Corrosivity to eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation Not sensitising. 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 vitroDoes 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 Not classified.

Inhalation Irritation of nose, throat and airway.

Ingestion May be harmful if swallowed. May cause burns in mucous membranes, throat, oesophagus

and stomach.

Skin contact This product is corrosive. Prolonged or repeated exposure may cause the following adverse

effects: Severe skin irritation. Redness. Burns can occur.

Eye contact This product is corrosive. A single exposure may cause the following adverse effects:

Irritation. Redness. Chemical burns.

Toxicological information on ingredients.

DISODIUM METASILICATE

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 5,000.0

mg/kg)

Species Rat

ATE dermal (mg/kg) 5,000.0

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AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

Acute toxicity - oral

Acute toxicity oral (LD₅o

mg/kg)

1,064.0

Species Rat

ATE oral (mg/kg) 1,064.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.1

mg/kg)

Species Rat

ATE dermal (mg/kg) 2,000.1

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin.

Serious eye damage/irritation

Serious eye Causes

damage/irritation

Causes serious eye irritation.

Skin sensitisation

Skin sensitisation Not sensitising.

Carcinogenicity

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

SECTION 12: Ecological information

Ecotoxicity There are no data on the ecotoxicity of this product. Not regarded as dangerous for the

environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

Toxicity Very toxic to aquatic organisms. Supplier's information.

Acute aquatic toxicity

LE(C)₅₀ $0.1 < L(E)C50 \le 1$

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 2.67 mg/l, Freshwater fish

Supplier's information.

Acute toxicity - aquatic

invertebrates

LC₅₀, 48 hours: 3.1 mg/l, Daphnia magna

Acute toxicity - aquatic Supplier's information.

plants EC₅₀, 72 hours: 0.146 mg/l, Freshwater algae

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Chronic aquatic toxicity

Chronic toxicity - fish early Supplier's information.

life stage NOEC, 302 days: 0.42 mg/l, Freshwater fish

Chronic toxicity - aquatic Supplier's information.

invertebrates NOEC, 21 days: 0.7 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product. The surfactant(s) contained in this

product 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.

Ecological information on ingredients.

AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

Biodegradation The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

Bioaccumulative potential No information available.

12.4. Mobility in soil

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

Ecological information on ingredients.

AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

Ecological information on ingredients.

AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

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

12.6. Other adverse effects

Other adverse effects Not known.

Ecological information on ingredients.

AMINES, C12-14 -ALKYLDIMETHYL, N-OXIDES

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Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods The generation of waste should be minimised or avoided wherever possible. Dispose of waste

to licensed waste disposal site in accordance with the requirements of the local Waste

Disposal Authority.

SECTION 14: Transport information

General For limited quantity packaging/limited load information, consult the relevant modal

documentation using the data shown in this section.

14.1. UN number

UN No. (ADR/RID) 1760

UN No. (IMDG) 1760

UN No. (ICAO) 1760

UN No. (ADN) 1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID)

CORROSIVE LIQUID, N.O.S. (CONTAINS DISODIUM METASILICATE, SODIUM

HYDROXIDE)

Proper shipping name (IMDG) CORROSIVE LIQUID, N.O.S. (CONTAINS DISODIUM METASILICATE, SODIUM

HYDROXIDE)

Proper shipping name (ICAO) CORROSIVE LIQUID, N.O.S. (CONTAINS DISODIUM METASILICATE, SODIUM

HYDROXIDE)

Proper shipping name (ADN) CORROSIVE LIQUID, N.O.S. (CONTAINS DISODIUM METASILICATE, SODIUM

HYDROXIDE)

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C9

ADR/RID label 8

IMDG class 8

ICAO class/division 8

ADN class 8

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

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ADN packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-A, S-B

ADR transport category 2

Emergency Action Code 2X

Hazard Identification Number 80

(ADR/RID)

Tunnel restriction code (E)

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

National regulations The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as

amended).

Control of Pollution (Special Waste) Regulations 1980 (as amended).

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment

Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

EH40/2005 Workplace exposure limits. The Hazardous Waste Regulations 2005.

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) 1907/2006,

Waste Material Code 91/689/EEC

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at

work (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

Guidance Technical Guidance WM2: Hazardous Waste.

COSHH Essentials.

ECHA Guidance on the Application of the CLP Criteria. ECHA Guidance on the compilation of safety data sheets.

Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

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

SECTION 16: Other information

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used in the safety data sheet STOT RE = Specific target organ toxicity-repeated exposure

PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. PNEC: Predicted No Effect Concentration.

DNEL: Derived No Effect Level.

Revision comments This is the first issue.

Revision date 14/10/2019

Revision 1

SDS number 22119

Hazard statements in full H228 Flammable solid.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation. H371 May cause damage to organs . H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.