

SAFETY DATA SHEET

Sterling Brake & Clutch Cleaner

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

1.1. Product identifier

Product name Sterling Brake & Clutch Cleaner

Product number LS 162

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

Identified uses Brake Cleaner

1.3. Details of the supplier of the safety data sheet

Supplier Beal (UK) Ltd
Sterling Works
Texas Street
Tingley (A650)
Leeds, West Yorkshire
LS27 0HG
T 0113 253 8888
F 0113 253 0223
sales@beal.org.uk

1.4. Emergency telephone number

Emergency telephone 0113 253 8888

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

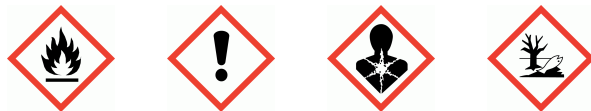
Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304

Environmental hazards Aquatic Chronic 2 - H411

Environmental This product contains substances which are very toxic or toxic to aquatic organisms and may cause long term effects to the aquatic environment (see sections 2 and 12)

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P273 Avoid release to the environment.</p> <p>P102 Keep out of reach of children.</p> <p>P262 Do not get in eyes, on skin, or on clothing.</p> <p>P280 Wear protective gloves.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P501 Dispose of contents/ container in accordance with local regulations.</p>
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Contains HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, PROPAN-2-OL

Detergent labelling ≥ 30% aliphatic hydrocarbons, < 5% perfumes, Contains d-LIMONENE

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

HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			60-100%
CAS number: —	EC number: 921-024-6	REACH registration number: 01-2119475514-35	
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			

PROPAN-2-OL			5-10%
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336			

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HEXANE-norm			<1%
CAS number: 110-54-3	EC number: 203-777-6	REACH registration number: 01-2119480412-44	
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361f STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			

TURPENTINE, OIL			<1%
CAS number: 8006-64-2	EC number: 232-350-7	REACH registration number: 01-2119502456-45	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411			

Pin-2(3)-ene			<1%
CAS number: 80-56-8	EC number: 201-291-9	REACH registration number: 01-2119519223-49	
M factor (Acute) = 1	M factor (Chronic) = 1		
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			

ETHANOL			<1%
CAS number: 64-17-5	EC number: 200-578-6	REACH registration number: 01-2119457610-43	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319			

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ETHYL ACETATE <1%		
CAS number: 141-78-6	EC number: 205-500-4	REACH registration number: 01-2119475103-46
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336		
TOLUENE <1%		
CAS number: 108-88-3	EC number: 203-625-9	REACH registration number: 01-2119471310-51
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304		
beta-Pinene <1%		
CAS number: 127-91-3	EC number: 204-872-5	REACH registration number: 01-2119519230-54-XXXX
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Asp. Tox. 1 - H304		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once.
Inhalation	If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Remove affected person from source of contamination. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
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 and get medical attention.

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.
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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 Foam. Dry chemicals. Water spray. Carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture

Specific hazards Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. The product is highly flammable. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

5.3. Advice for firefighters

Protective actions during firefighting Use water to keep fire exposed containers cool and disperse vapours. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Use water spray to reduce vapours.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. 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. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Read and follow manufacturer's recommendations. Use good earthing procedures when decanting from container.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store at moderate temperatures in dry, well ventilated area. Keep away from heat, sparks and open flame.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

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SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Long-term exposure limit (8-hour TWA): WEL 1200 mg/m³

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

HEXANE-norm

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³

TURPENTINE, OIL

Long-term exposure limit (8-hour TWA): WEL 100 ppm 566 mg/m³

Short-term exposure limit (15-minute): WEL 150 ppm 850 mg/m³

Pin-2(3)-ene

Short-term exposure limit (15-minute): WEL 300 mg/m³ 50 ppm

Long-term exposure limit (8-hour TWA): WEL 140 mg/m³ 25 ppm

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm

Short-term exposure limit (15-minute): WEL 400 ppm

TOLUENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m³

Sk

beta-Pinene

Short-term exposure limit (15-minute): WEL 300 mg/m³ 50 ppm

Long-term exposure limit (8-hour TWA): WEL 140 mg/m³ 25 ppm

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

Ingredient comments

WEL = Workplace Exposure Limits

PROPAN-2-OL (CAS: 67-63-0)

DNEL

Industry - Dermal; Long term systemic effects: 888 mg/kg/day

Industry - Inhalation; Long term systemic effects: 500 mg/m³

Consumer - Dermal; Long term systemic effects: 319 mg/kg/day

Consumer - Dermal; Long term systemic effects: 26 mg/kg/day

Consumer - Inhalation; Long term systemic effects: 89 mg/m³

PNEC

- Fresh water; 140.9 mg/l

- marine water; 140.9 mg/l

- Intermittent release; 140.9 mg/l

- Sediment (Freshwater); 552 mg/kg

- Sediment (Marinewater); 552 mg/kg

- STP; 2251 mg/l

- Soil; 28 mg/kg

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ETHANOL (CAS: 64-17-5)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Short term : 1900 mg/m ³ Industry - Dermal; Long term : 343 mg/kg/day Industry - Inhalation; Long term : 950 mg/m ³ Consumer - Inhalation; Short term : 950 mg/m ³ Consumer - Dermal; Long term : 206 mg/kg/day Consumer - Inhalation; Long term : 114 mg/m ³ Consumer - Oral; Long term : 87 mg/kg/day
PNEC	- Fresh water; 0.96 mg/l - marine water; 0.79 mg/l - Sediment; 3.6 mg/kg - Soil; 0.62 mg/kg - STP; 580 mg/l - STP; 580 mg/l - Intermittent release; 2.75 mg/l - Sediment (Marinewater); 2.9 mg/kg - Soil; 0.63 mg/kg - ;

TOLUENE (CAS: 108-88-3)

DNEL	General population - Inhalation; : 226 mg/m ³
PNEC	- Fresh water; 0.68 mg/l - marine water; 0.68 mg/l - Soil; 2.89 mg/kg

8.2. Exposure controls

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.
Personal protection	When using do not smoke
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.
Hand protection	Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material.
Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Hydrocarbons.
Melting point	- 95°C

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Initial boiling point and range	60-95°C @ 760 mm Hg
Flash point	< 0°C Closed cup.
Evaporation rate	2 (diethyl ether = 1)
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.9% Upper flammable/explosive limit: 8%
Vapour pressure	2.7 kPa @ °C
Vapour density	3.6
Relative density	0.722 @ °C
Bulk density	678 - 690 kg/m ³
Solubility(ies)	Insoluble in water.
Partition coefficient	Pow: 3.6
Auto-ignition temperature	413°C
Viscosity	0.005 cm ² /s @ 20°C
Explosive properties	May form explosive mixture with air at very high concentration.
Comments	Information given is applicable to the major ingredient.

9.2. Other information

Other information	Not available.
Volatile organic compound	This product contains a maximum VOC content of 680 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable at normal ambient temperatures and when used as recommended.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Does not decompose when used and stored as recommended.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Oxidising agents. Reducing agents.
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10.5. Incompatible materials

Materials to avoid	Keep away from oxidising materials, heat and flames.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
Ingestion	Harmful: may cause lung damage if swallowed.
Skin contact	Irritating to skin. Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Irritating to eyes. Repeated exposure may cause chronic eye irritation.
Acute and chronic health hazards	Contents may cause lung damage if swallowed. Aspiration into the lungs may cause chemical pneumonitis. Irritating to skin. Irritating to eyes.
Route of exposure	Inhalation Ingestion.
Target organs	Respiratory system, lungs

SECTION 12: Ecological information

Ecotoxicity	This product has not been tested but contains ingredients which are toxic or very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. During normal use the volatility of the components and the packaging form, pressurised container, make entry into the aquatic environment unlikely, however, do not empty or discharge into drains or watercourses. Ensure container is empty before disposal to prevent contents entering watercourses.
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12.1. Toxicity

Toxicity	Not available.
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12.2. Persistence and degradability

Persistence and degradability	Not available.
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12.3. Bioaccumulative potential

Bioaccumulative potential	Not available.
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Partition coefficient	Pow: 3.6
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12.4. Mobility in soil

Mobility	Not known.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not available.
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12.6. Other adverse effects

Other adverse effects	Not available.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Avoid the spillage or runoff entering drains, sewers or watercourses.
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SECTION 14: Transport information

General	Packs of 1L or less are not regulated under the limited quantities provisions .
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14.1. UN number

UN No. (ADR/RID)	1993
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UN No. (IMDG) 1993

UN No. (ICAO) 1993

UN No. (ADN) 1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (CONTAINS HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, HEXANE-norm)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, HEXANE-norm, d-LIMONENE, para-mentha-1,4(8)-diene)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, HEXANE-norm)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, HEXANE-norm)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

ADN packing group II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-E, S-E

ADR transport category 2

Emergency Action Code •3YE

Hazard Identification Number (ADR/RID) 33

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Tunnel restriction code (D/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	Control of Substances Hazardous to Health Regulations 2002 (as amended). EH40/2005 Workplace exposure limits. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EU legislation	Commission Regulation (EU) No 2015/830 of 28 May 2015. 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). 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).
Guidance	Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	Supplemental information added.
Revision date	07/09/2020
Revision	3
SDS number	12693
SDS status	Approved.
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H361f Suspected of damaging fertility. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

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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.