

SAFETY DATA SHEET

Sterling Brake Cleaner

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

1.1. Product identifier

Product name Sterling Brake Cleaner

Product number LS28

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 Aerosol 1 - H222, H229

Health hazards Skin Irrit. 2 - H315 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

Human health Gas or vapour is harmful on prolonged exposure or in high concentrations. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Environmental The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Hazard pictograms



Signal word

Danger

Sterling Brake Cleaner

Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P261 Avoid breathing spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. 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. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 Dispose of contents/ container in accordance with national regulations.
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

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS	30-60%
CAS number: 68476-85-7	EC number: 270-704-2
Classification	
Flam. Gas 1A - H220	
Press. Gas (Liq.) - H280	

Sterling Brake Cleaner

HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics,			30-60%
<5% n-hexane			
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			1-5%
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			
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			

Sterling Brake Cleaner

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		
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		

Sterling Brake Cleaner

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. 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. Continue to rinse for at least 15 minutes.

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

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	Extinguish with foam, carbon dioxide, dry powder or water fog.
-------------------------------------	--

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up. The product is highly flammable.
-------------------------	--

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.
---	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Sterling Brake Cleaner

Personal precautions Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

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. Absorb spillage with non-combustible, absorbent material. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion.

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 Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Do not spray near a naked flame or any incandescent material.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated area. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 degrees Centigrade. Do not pierce or burn, even after use.

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

PETROLEUM GASES, LIQUEFIED; PETROLEUM GAS

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m³

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m³

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

Sterling Brake Cleaner

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/m ³ 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/m ³
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

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 - ;

Sterling Brake Cleaner

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

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. 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. 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

Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Hygiene measures

Wash hands after handling. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless to pale yellow.
Odour	Organic solvents.
Initial boiling point and range	-40 to -2°C @ 1013 hPa
Flash point	< -40°C
Upper/lower flammability or explosive limits	Lower : 1.8% - Upper 9.5%
Vapour pressure	ca. 590 to 1760 kPa @ 45°C
Vapour density	ca. 1.5 at 15°C
Auto-ignition temperature	410-580°C
Comments	Information given is applicable to the major ingredient.

9.2. Other information

Other information	Not available.
--------------------------	----------------

Sterling Brake Cleaner

Volatile organic compound This product contains a maximum VOC content of 598 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stability Avoid the following conditions: Heat, sparks, flames.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Keep away from oxidising materials, heat and flames.

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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General information Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

Inhalation In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

Skin contact Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Vapour or spray in the eyes may cause irritation and smarting. Repeated exposure may cause chronic eye irritation.

Acute and chronic health hazards Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of exposure Inhalation Skin absorption

Target organs Central nervous system Respiratory system, lungs

Medical symptoms Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

SECTION 12: Ecological information

Sterling Brake Cleaner

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.

12.1. Toxicity

Toxicity Not available.

12.2. Persistence and degradability

Persistence and degradability Not available.

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

12.4. Mobility in soil

Mobility Not known.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

SECTION 14: Transport information

General

This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities. Aerosols not so packed and labelled must show the following.

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

Proper shipping name (IMDG) AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

Proper shipping name (ICAO) AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

Sterling Brake Cleaner

Proper shipping name (ADN) AEROSOLS (HYDROCARBONS, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-D, S-U
Tunnel restriction code	(D)

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). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended). The Aerosol Dispensers Regulations 1977 & 1999
EU legislation	Commission Regulation (EU) No 453/2010 of 20 May 2010.
Guidance	Workplace Exposure Limits EH40. CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. British Aerosol Manufacturers Code of Practice 7th. Edition 1999

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Sterling Brake Cleaner

SECTION 16: Other information

Revision comments	Supplemental information added. Revised formulation.
Revision date	20/07/2021
Revision	3
SDS number	12665
SDS status	Approved.
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H229 Pressurised container: may burst if heated. H280 Contains gas under pressure; may explode if heated. 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.

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.