

SAFETY DATA SHEET CAFLON BS6580



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

1.1. Product identifier

Product name	CAFLON BS6580
Product number	11667
Synonyms; trade names	CAFLON BS6580 CLEAR,CAFLON BS6580 BLUE,ANTIFREEZE 9509010,ANTIFREEZE BBU9437,ANTIFREEZE BBU9436,ANTIFREEZE BBU9355,ANTIFREEZE DRIVETEC BS6580 DTBA,ANTIFREEZE 9505036,ANTIFREEZE 0867225,ANTIFREEZE BS6580 BLUE 50% SOL

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

Identified uses Antifreeze liquid.

1.3. Details of the supplier of the safety data sheet

Supplier Hexeal Chemicals Ltd
 21 Mackintosh Road
 Rackheath
 Norwich
 NR13 6LJ
 +44 1603-720202
 sales@hexchem.co.uk

1.4. Emergency telephone number

Emergency Contact Number +44 1603 720202
 (Office Hours)

Emergency Contact Number +441603 720202
 (Outside Office Hours)

Sds No. 11667

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Not Classified
Health hazards	Acute Tox. 4 - H302 STOT RE 2 - H373
Environmental hazards	Not Classified

Classification (67/548/EEC or 1999/45/EC) Xn;R22.

2.2. Label elements

CAFILON BS6580

Pictogram



Signal word	Warning
Hazard statements	H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
Precautionary statements	P260 Do not breathe vapour/spray. P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P314 Get medical advice/attention if you feel unwell. P330 Rinse mouth. P501 Dispose of contents/container in accordance with national regulations.
Contains	ETHANEDIOL

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANEDIOL	45-100%
CAS number: 107-21-1	EC number: 203-473-3 REACH registration number: 01-2119456816-28
Classification Acute Tox. 4 - H302 STOT RE 2 - H373	Classification (67/548/EEC or 1999/45/EC) Xn; R48/22, R22
2-ETHYLHEXANOIC ACID, SODIUM SALT	1-
5% CAS number: 19766-89-3	EC number: 243-283-8 REACH registration number: 01-2119488942-23-XXXX
Classification Repr. 2 - H361d	Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 3 R63

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

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

CAFILON BS6580

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 any discomfort continues.

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

Inhalation Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion Ingestion of large amounts may cause unconsciousness. Harmful if swallowed. May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

Skin contact Prolonged skin contact may cause redness and irritation.

Eye contact May cause temporary eye irritation.

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

Notes for the doctor If several ounces (60 - 100 ml) of ethylene glycol have been ingested, early administration of ethanol may counter the toxic effects (metabolic acidosis, renal damage). Consider hemodialysis or peritoneal dialysis & thiamine 100 mg plus pyridoxine 50 mg intravenously every 6 hours. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol (EG), di- or triethylene glycol (DEG, TEG), ethylene glycol butyl ether (EGBE), or methanol intoxication if available. Fomepizole protocol: loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours, increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, TEG or EGBE are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Maintain adequate ventilation and oxygenation of the patient. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Ketones. Aldehydes.

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. Contain and collect extinguishing water.

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

CAFLON BS6580

Personal precautions Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions 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 Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Provide adequate ventilation.

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

Occupational exposure limits

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m³ vapour

Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³ vapour

Sk, Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Ingredient comments WEL = Workplace Exposure Limits

ETHANEDIOL (CAS: 107-21-1)

Ingredient comments	WEL = Workplace Exposure Limits
DNEL	Industry - Inhalation; Short term : 35 mg/m ³ Industry - Dermal; Long term : 106 mg/kg/day Consumer - Dermal; Long term : 53 mg/kg/day Consumer - Inhalation; Long term : 7 mg/m ³
PNEC	- Fresh water; 10 mg/l - Marine water; 1 mg/l - Soil; 1.53 mg/l - STP; 199.5 mg/l

CAFLON BS6580



Engineering controls

Equipment

Appropriate engineering controls



Eye/face protection

Hand protection

Other skin and body protection

Hygiene measures

Respiratory protection

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

The following protection should be worn: Chemical splash goggles. EN 166

Use protective gloves. 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. Butyl rubber. Polyvinyl chloride (PVC). EN 374

Wear suitable protective clothing as protection against splashing or contamination.

Eating, smoking and water fountains prohibited in immediate work area.

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. EN 136/140/145/143/149

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Various colours.
Odour	Mild.
Odour threshold	Data
lacking. pH	
Data lacking. Initial boiling point and range	
198°C @ Flash point	
Data lacking.	
Evaporation rate	Data lacking.
Upper/lower flammability or explosive limits	Data lacking.
Vapour pressure	Data lacking.
Vapour density	Data lacking.
Relative density	1.06 - 1.14 @ °C
Solubility(ies)	Soluble in
water. Partition coefficient	Not
available. Auto-ignition temperature	Data
lacking. Decomposition Temperature	Data
lacking. Viscosity	Data
lacking. Explosive properties	Data
lacking.	

CAFLON BS6580

Oxidising properties Not available.

9.2. Other information

Other information Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of the following substances: Carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 549.45054945

Inhalation Vapour may irritate respiratory system/lungs. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.

Ingestion Harmful if swallowed. May cause liver and/or renal damage. May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact May cause temporary eye irritation.

Target organs Liver Kidneys

Toxicological information on ingredients.

ETHANEDIOL

Acute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 10,600 mg/kg)

CAFLON BS6580

Species	Rabbit
Notes (dermal LD ₅₀)	LD ₅₀ > 10600 mg/kg, Dermal, Rabbit
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC ₅₀ vapours mg/l)	2.5
Species	Rat
Notes (inhalation LC ₅₀) ATE inhalation (vapours mg/l)	LD ₅₀ > 2.5 mg/l, Inhalation, Rat 2.5
<u>Skin corrosion/irritation</u>	
Animal data	Data lacking.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Data lacking.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	There is no evidence that the product can cause cancer.
<u>Reproductive toxicity</u>	
Reproductive toxicity - development	Symptoms following overexposure may include the following: Possible risk of adverse reproductive effects.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.
Inhalation	Vapour may irritate respiratory system/lungs.
Ingestion	Harmful if swallowed. Lethal dose to humans 100ml
Skin contact	Prolonged and frequent contact may cause redness and irritation.
Eye contact	May cause temporary eye irritation.
Target organs	Liver Kidneys

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

CAFLOX BS6580

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

ETHANEDIOL

Acute toxicity - fish	LC50, 96 hours, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC50, 48 hours, 48 hours: > 100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC50, 96 hours, 96 hours: 6500 - 13000 mg/l,
Acute toxicity - microorganisms	EC50, 30 min, 30 minutes: 225 mg/l, Activated sludge

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

Ecological information on ingredients.

ETHANEDIOL

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	- Degradation (%) 90%: > 10 days OECD 301A

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient Not available.

Ecological information on ingredients.

ETHANEDIOL

Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient	-1.36

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

ETHANEDIOL

Mobility	The product is soluble in water.
Adsorption/desorption coefficient	Soil - Koc: 1 @ °C

12.5. Results of PBT and vPvB assessment

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

Ecological information on ingredients.

CAFLON BS6580

ETHANEDIOL

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

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

ETHANEDIOL

Cod 1.22

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. 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.

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

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

CAFLON BS6580

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
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 (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	Workplace Exposure Limits EH40. CHIP for everyone HSG228. 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	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	15/05/2015
Revision	03
Supersedes date	16/04/2014
SDS number	11667
SDS status	Approved.
Signature	J Spenceley
Risk phrases in full	R22 Harmful if swallowed. R63 Possible risk of harm to the unborn child.
Hazard statements in full	H302 Harmful if swallowed. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure if swallowed. H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.