

SAFETY DATA SHEET CAFLON OAT COOLANT

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

1.1. Product identifier

Product name CAFLON OAT COOLANT

Product number 15104

Synonyms; trade names ANTIFREEZE OAT, ANTIFREEZE CAFLON OAT, ANTIFREEZE CAFLON OAT 50%

SOLUTION

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

Identified uses Antifreeze liquid. Antifreeze for vehicles,

1.3. Details of the supplier of the safety data sheet

Supplier Hexeal Chemicals Ltd

Norwich Road GreatPlumstead Norwich

NR13 5FW +44 1603 720202

+44 1603 720202 sales@hexchem.co.uk

1.4. Emergency telephone number

Emergency telephone SGS - +32 (0)3 575 55 55 (24h)

Sds No. 15104

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 STOT RE 2 - H373

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms





Signal word Warning

Hazard statements H302 Harmful if swallowed.

H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure.

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Precautionary statements P260 Do not breathe vapour/ spray.

P264 Wash contaminated skin thoroughly after handling.

P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

P314 Get medical advice/ attention if you feel unwell.

P501 Dispose of contents/ container in accordance with national regulations.

Contains ETHANEDIOL

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

ETHANEDIOL 45 - 100%

CAS number: 107-21-1 EC number: 203-473-3 REACH registration number: 01-

2119456816-28-XXXX

Classification

Acute Tox. 4 - H302 STOT RE 2 - H373

2-ETHYLHEXANOIC ACID, SODIUM SALT

<4%

CAS number: 19766-89-3 EC number: 243-283-8 REACH registration number: 01-

2119488942-23-XXXX

Classification Repr. 2 - H361d

The full text for all hazard statements is 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.

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 Harmful if swallowed. Ingestion of large amounts may cause unconsciousness. Causes

damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

Skin contact Prolonged skin contact may cause redness and irritation.

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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.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion

products

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

for firefighters

Special protective equipment 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 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

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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

Sk

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

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/m³

Industry - Dermal; Long term : 106 mg/kg/day Consumer - Dermal; Long term : 53 mg/kg/day Consumer - Inhalation; Long term : 7 mg/m³

PNEC - Fresh water; 10 mg/l

marine water; 1 mg/lSoil; 1.53 mg/kgSTP; 199.5 mg/l

Sediment (Freshwater); 37 mg/kgSediment (Marinewater); 3.7 mg/kg

- Intermittent release; 10 mg/l

8.2. Exposure controls

Protective equipment







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Appropriate engineering

controls

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

exposure limits for the product or ingredients.

Eye/face protection The following protection should be worn: Chemical splash goggles. Personal protective

equipment for eye and face protection should comply with European Standard EN166.

Hand protection 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). To protect hands from chemicals, gloves should comply with European

Standard EN374.

Other skin and body

protection

Wear suitable protective clothing as protection against splashing or contamination.

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

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator

fitted with the following cartridge: Combination filter, type A2/P3. EN 136/140/141/145/143/149

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 No information available.

рΗ No information available.

No information available. Melting point Initial boiling point and range No information available.

No information available.

Flash point

Evaporation No information available. rate

No information available. **Evaporation factor**

No information available. Flammability (solid, gas)

Upper/lower flammability or

explosive limits

No information available.

No information available. Other flammability

No information available. Vapour pressure

Vapour density No information available.

Relative density 1.06 - 1.14

No information available. Bulk density

Soluble in water. Solubility(ies)

Partition coefficient Not available.

No information available. Auto-ignition temperature Decomposition Temperature No information available.

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Viscosity No information available.

Explosive properties No information available.

Explosive under the influence No information available.

of a flame

Oxidising properties Not determined.

9.2. Other information

Other information Not available.

Refractive index No information available.

Particle size No information available.

Molecular weight No information available.

Volatility No information available.

Saturation concentration No information available.

Critical temperature No information available.

Volatile organic compound No information available.

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

Will not polymerise.

reactions

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 Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

products vapours. Aldehydes. Ketones. Oxides of the following substances: Carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 549.45

Skin corrosion/irritation

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

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Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs (Kidneys) through prolonged or repeated exposure if

swallowed.

Aspiration hazard

Aspiration hazard No information available.

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

Acute toxicity oral (LD₅₀ 1,600.0

mg/kg)

Species Human

Notes (oral LD₅₀) Harmful if swallowed.

LD₅₀ 1600 mg/kg, Oral, Human

ATE oral (mg/kg) 1,600.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 3,500.0

mg/kg)

Species Mouse

Notes (dermal LD₅₀) LD₅₀ 3500 mg/kg, Dermal, Mouse

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ATE dermal (mg/kg) 3,500.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ vapours mg/l)

2.5

Notes (inhalation LC_{50}) $LD_{50} > 2.5 \text{ mg/l}$, Inhalation, Rat

ATE inhalation (vapours

2.5

mg/l)

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye

Not irritating.

damage/irritation

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vivo

This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity -

Symptoms following overexposure may include the following: Possible risk of

development adverse reproductive effects.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs (Kidneys) through prolonged or repeated exposure if

swallowed.

Target organs Kidneys

Aspiration hazard

Aspiration hazard No information available.

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.

Acute and chronic health May cause damage to organs (Kidneys) through prolonged or repeated exposure if

hazards swallowed.

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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.

Ecological information on ingredients.

ETHANEDIOL

Ecotoxicity The product components are not classified as environmentally hazardous.

However, this does not exclude the possibility that large or frequent spills can have a

harmful or damaging effect on the environment.

12.1. Toxicity

Toxicity No data available.

Ecological information on ingredients.

ETHANEDIOL

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic

invertebrates

 EC_{50} , 48 hours: > 100 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC₅₀, 96 hours: 6500 - 13000 mg/l,

Acute toxicity -

microorganisms

EC₅₀, 30 minutes: 225 mg/l, Activated sludge

2-ETHYLHEXANOIC ACID, SODIUM SALT

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 100 mg/l, Oryzias latipes (Red killifish)

OECD 203

OECD 202

Acute toxicity - aquatic

EC₅₀, 48 hours: 910 mg/l, Daphnia magna

invertebrates

Chronic aquatic toxicity

Chronic toxicity - aquatic NOEC, 21 days: 18 mg/l, Daphnia magna

invertebrates OECD 211

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.

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Biodegradation - Degradation (%) 90%: > 10 days

OECD 301A

12.3. Bioaccumulative potential

Partition coefficient Not available.

Ecological information on ingredients.

ETHANEDIOL

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Kow: -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

Water - Koc: 1 @ °C

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.

ETHANEDIOL

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

assessment

2-ETHYLHEXANOIC ACID, SODIUM SALT

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 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 should be treated as controlled waste. Do not puncture or incinerate, even when

empty.

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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

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

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).

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

Restrictions (Annex XVII

This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 Regulation 1907/2006) (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE

MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND

ARTICLES. Entry number: 3

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

CAFLON OAT COOLANT

Abbreviations and acronyms ATE: Acute Toxicity Estimate.

used in the safety data sheet ADR: European Agreement concerning the International Carriage of Dangerous Goods by

ADN: European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways.

CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level.

IATA: International Air Transport Association.

IMDG: International Maritime Dangerous Goods.

Kow: Octanol-water partition coefficient.

LC₅₀: Lethal Concentration to 50 % of a test population.

 LD_{50} : Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006.

RID: European Agreement concerning the International Carriage of Dangerous Goods by

Rail.

vPvB: Very Persistent and Very Bioaccumulative.

IARC: International Agency for Research on Cancer.

MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978.

cATpE: Converted Acute Toxicity Point Estimate.

BCF: Bioconcentration Factor.

BOD: Biochemical Oxygen Demand.

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

EC₅₀: 50% of maximal Effective Concentration.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration. LOEC: Lowest Observed Effect Concentration.

DMEL: Derived Minimal Effect Level.

EL50: Exposure Limit 50

hPa: Hectopascal

LL50: Lethal Loading fifty

OECD: Organisation for Economic Co-operation and Development

POW: Octanol-water partition coefficient SCBA: self-contained breathing apparatus

STP: Sewage Treatment Plant VOC: Volatile Organic Compounds

Classification abbreviations

Acute Tox. = Acute toxicity

and acronyms

Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and

Supplier's information.

sources for data

Classification procedures according to Regulation (EC) Acute Tox. 4 - H302: Calculation method. STOT RE 2 - H373: Calculation method.

1272/2008

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 19/04/2022

CAFLON OAT COOLANT

Version number 1.002

Supersedes date 25/10/2017

SDS number 15104

SDS status Approved.

Hazard statements in full H302 Harmful if swallowed.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure.

H373 May cause damage to organs through prolonged or repeated exposure.

Signature Jitendra Panchal

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.