

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 01/05/2015 Revision date: 07/02/2023 Supersedes version of: 16/03/2021 Version: 2.4

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

1.1. Product identifier

Product form	
Product name	
Product code	
Product group	

: Mixture : 45170 - COOLANT XL : 45170 : Antifreeze

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

1.2.1. Relevant identified uses

Intended for general public Main use category

: Professional use, Consumer use, Industrial use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

77 Lubricants B.V. NL- 1761 JA The Netherlands T +31 (0)78 6527652 technical@77lubricants.nl - www.77lubricants.nl

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302 Specific target organ toxicity - Repeated exposure, Category 2 H373 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause damage to organs (kidneys) through prolonged or repeated exposure. Harmful if swallowed.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) Contains

ethanediol; ethylene glycol :

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Hazard statements (CLP)	: H302 - Harmful if swallowed. H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP)	 P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read carefully and follow all instructions. P260 - Do not breathe dust, fume, gas, mist, spray, vapours. P264 - Wash in contact with skin thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
disodium tetraborate pentahydrate; borax pentahydrate (12179-04-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
disodium tetraborate pentahydrate; borax pentahydrate(12179-04-3)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanediol; ethylene glycol substance with national workplace exposure limit(s) (AT, BE, DE, DK, ES, FI, FR, GB, NL, SE, NO, CH); substance with a Community workplace exposure limit	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816- 28	≥ 75	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Sodium benzoate	CAS-No.: 532-32-1 EC-No.: 208-534-8 REACH-no: 01-2119460683- 33, 01-2119460683-35	≥1-<5	Eye Irrit. 2, H319
disodium tetraborate pentahydrate; borax pentahydrate substance listed as REACH Candidate (Disodium tetraborate, anhydrous) substance with national workplace exposure limit(s) (GB)	CAS-No.: 12179-04-3 EC-No.: 215-540-4 EC Index-No.: 005-011-00-4 REACH-no: 01-2119490790- 32	≥ 0.1 – < 3	Repr. 1B, H360FD

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
disodium tetraborate pentahydrate; borax pentahydrate	CAS-No.: 12179-04-3 EC-No.: 215-540-4 EC Index-No.: 005-011-00-4 REACH-no: 01-2119490790- 32	(6.5 ≤ C < 100) Repr. 1B, H360FD

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 Call a poison center or a doctor if you feel unwell. Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. Rinse mouth. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effect	s, both acute and delayed
Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	 After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear. After adequate first aid, no further treatment is required unless symptoms reappear.

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

Treat symptomatically.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment and emergency procedures			
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Do not breathe dust, fume, gas, mist, spray, vapours.		
6.1.2. For emergency responders Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment and cleaning up			
Methods for cleaning up	: Take up liquid spill into absorbent material.		

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Other information

: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and stor	age
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust, fume, gas, mist, spray, vapours. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, in	ncluding any incompatibilities
Storage conditions Storage temperature	 Store in a well-ventilated place. Keep cool. 50 °C
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ethanediol; ethylene glycol (107-21-1)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Ethylene glycol	
IOEL TWA	52 mg/m³	
IOEL TWA [ppm]	20 ppm	
IOEL STEL	104 mg/m ³	
IOEL STEL [ppm]	40 ppm	
Remark	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	52 mg/m³ 8 Hrs	
WEL STEL (OEL STEL)	104 mg/m³ 15 Min	
disodium tetraborate pentahydrate; borax pentahydrate (12179-04-3)		
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	1 mg/m³	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Salety	giasses	

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Polyvinylchloride (PVC)				EN ISO 374
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes)	0.7		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic phy	ical and chemical properties	
Physical state	: Liquid	
Colour	: Blue-green.	
Odour	: characteristic.	
Odour threshold	: Not available	
Melting point	: Not applicable	

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Freezing point	: -40 °C
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 8.4
Viscosity, kinematic	: Not available
Solubility	: completely soluble.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1.076 kg/m³ @ 20°C
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information			
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008			
Acute toxicity (oral): Harmful if swallowed.Acute toxicity (dermal): Not classifiedAcute toxicity (inhalation): Not classified			
45170 - COOLANT XL			
ATE CLP (oral)	510.204 mg/kg bodyweight		

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ethanediol; ethylene glycol (107-21-1)	
LD50 oral (rat)	4000 mg/kg
LD50 dermal	> 3500 mg/kg
LC50 inhalation (rat) (mg/l)	> 2.5 mg/l (6h)
Sodium benzoate (532-32-1)	
LD50 oral (rat)	3450 mg/kg bodyweight Animal: rat, 95% CL: 3150 - 3740
LD50 dermal (rabbit)	> 2000 mg/kg bodyweight Animal: rabbit
LC50 inhalation (rat) (mg/l)	> 12.2 mg/l air Animal: rat
Skin corrosion/irritation :	Not classified
Serious eye damage/irritation :	pH: 8.4 Not classified pH: 8.4
Respiratory or skin sensitisation :	Not classified
Germ cell mutagenicity : Carcinogenicity :	Not classified Not classified
ethanediol; ethylene glycol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight mouse, male
Reproductive toxicity : STOT-single exposure :	Not classified Not classified
	May cause damage to organs through prolonged or repeated exposure.
ethanediol; ethylene glycol (107-21-1)	······································
NOAEL (subchronic, oral, animal/male, 90 days)	150 mg/kg bodyweight
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Sodium benzoate (532-32-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat
NOAEL (dermal, rat/rabbit, 90 days)	> 2500 mg/kg bodyweight Animal: rabbit, Guideline: EPA OPP 82-2 (Repeated Dose Dermal Toxicity -21/28 Days)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	≤ 0.025 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
Aspiration hazard :	Not classified
ethanediol; ethylene glycol (107-21-1)	
Viscosity, kinematic	14.505 mm²/s
11.2. Information on other hazards	

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute)	: Not classified
Hazardous to the aquatic environment, long–term (chronic)	: Not classified

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ethanediol; ethylene glycol (107-21-1)		
LC50 - Fish [1]	72860 mg/l Test organisms (species): Pimephales promelas	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna	
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other:grenn algae	
NOEC chronic fish	15380 mg/l Pimephales promelas	
NOEC chronic crustacea	8590 mg/l Daphnia magna	
Threshold limit - Algae [1]	10000 mg/l 168 Hrs	
Threshold limit - Algae [2]	2000 mg/l 192 Hrs	
disodium tetraborate pentahydrate; borax pe	ntahydrate (12179-04-3)	
LC50 - Fish [1]	79.7 mg/l	
12.2. Persistence and degradability		
ethanediol; ethylene glycol (107-21-1)		
Persistence and degradability	Readily biodegradable. easily degradable in the soil.	
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance	
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance	
ThOD	1.29 g O ₂ /g substance	
BOD (% of ThOD)	0.36 % ThOD	
Biodegradation	90 % (OECD 301A)	
12.3. Bioaccumulative potential		
ethanediol; ethylene glycol (107-21-1)		
Bioconcentration factor (BCF REACH)	10	
Partition coefficient n-octanol/water (Log Pow)	-1.36	
12.4. Mobility in soil		
ethanediol; ethylene glycol (107-21-1)		
Surface tension	0.048 N/m @ 20°C	
12.5. Results of PBT and vPvB assessment		
Component		
disodium tetraborate pentahydrate; borax pentahydrate (12179-04-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		
SECTION 13: Disposal considerations		

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

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Product/Packaging disposal recommendations European List of Waste (LoW, EC 2000/532) HP Code	 Dispose in a safe manner in accordance with local/national regulations. 16 01 14* - antifreeze fluids containing dangerous substances HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal
	administration, or inhalation exposure.

SECTION 14: Transport information

ADR	IMDG	ΙΑΤΑ	ADN	RID
I4.1. UN number or ID n	umber			
Not regulated for transport				
14.2. UN proper shippin	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group	·,			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport No data available

Transport by sea No data available

Air transport No data available

Inland waterway transport No data available

Rail transport No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

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REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: Disodium tetraborate, anhydrous (EC 215-540-4, CAS 12179-04-3)

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Signal word (CLP)	Modified	
2.2	Hazard pictograms (CLP)	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	Hazard statements (CLP)	Modified	

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	

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Abbreviations and acronyms:		
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H302	Harmful if swallowed.	
H319	Causes serious eye irritation.	
H360FD	May damage fertility. May damage the unborn child.	
H373	May cause damage to organs through prolonged or repeated exposure.	
Repr. 1B	Reproductive toxicity, Category 1B	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.