

**Safety data sheet**  
**1907/2006/EC, EU Nr. 453/2010**

Printing date 05.12.2013

Version number 4

Revision: 20.11.2013

<b>1 Identification of the substance/mixture and of the company/undertaking</b>	
<b>· 1.1 Product identifier</b>	
<b>· Trade name:</b> <u>CALGUARD 100</u>	
<b>· Productname (REACH) -</b>	
<b>· Article number:</b> 102040320	
<b>· 1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	
No further relevant information available.	
<b>· Application of the substance / the mixture</b>	
Coolant/ Cutting solution	
<b>· 1.3 Details of the supplier of the safety data sheet</b>	
<b>· Manufacturer/Supplier:</b>	
Caldic UK	
Stainsby Close, Holmewood I. E.	
Chesterfield, Derbyshire S42 5UG, UK	
Tel. +44 1246 854111	
<b>· Further information obtainable from:</b>	
qhse@caldic.be	
reach@caldic.com	
<b>· 1.4 Emergency telephone number:</b>	
+32(0)14 584 545 - Brandweer informatiecentrum gevaarlijke stoffen (BIG)	
0870 243 2241 or +44 (0)20 7771 5310 - United Kingdom Poisons Information Centre	
+353 1 8379964 - Ireland Poisons Information Centre	
<b>· Additional Info</b> See section 16 for your Emergency Number	

**2 Hazards identification**

<b>· 2.1 Classification of the substance or mixture</b>
<b>· Classification according to Regulation (EC) No 1272/2008</b>
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
Acute Tox. 4 H302 Harmful if swallowed.
<b>· Classification according to Directive 67/548/EEC or Directive 1999/45/EC</b>
Xn; Harmful
R22: Harmful if swallowed.
<b>· Information concerning particular hazards for human and environment:</b>
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
<b>· Classification system:</b>
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
<b>· 2.2 Label elements</b>
<b>· Labelling according to Regulation (EC) No 1272/2008</b>
The product is classified and labelled according to the CLP regulation.

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**· Hazard pictograms**



GHS07    GHS08

**· Signal word** Warning

**· Hazard-determining components of labelling:**  
ethanediol

**· Hazard statements**

H302 Harmful if swallowed.

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

**· Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash possible exposed body surfaces thoroughly after handling this product.

P270 Do not eat, drink or smoke when using this product.

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

P314 Get medical advice/attention if you feel unwell.

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

**· 2.3 Other hazards**

**· Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**3 Composition/information on ingredients**

**· 3.1 Chemical characterization: Substances**

· **Identification number(s)** Not applicable.

**· 3.2 Chemical characterization: Mixtures**

· **Description:** Mixture: consisting of the following components.

**· Dangerous components:**

CAS: 107-21-1	ethanediol	50-100%
EINECS: 203-473-3	Xn R22	
Reg.nr.: 01-2119456816-28	STOT RE 2, H373;  Acute Tox. 4, H302	
CAS: 532-32-1	sodium benzoate	2.5-5%
EINECS: 208-534-8	Xi R36	
Reg.nr.: 01-2119460683-35	Eye Irrit. 2, H319	
CAS: 12179-04-3	disodium tetraborate pentahydrate	0.1- <1%
EINECS: 215-540-4	T Repr. Cat. 1 R60-61;  Xi R36	
Reg.nr.: 01-2119490790-32	Repr. 1B, H360FD;  Eye Irrit. 2, H319	

**· SVHC**

12179-04-3 disodium tetraborate pentahydrate

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- **Additional information:** For the wording of the listed risk phrases refer to section 16.

**4 First aid measures**

- **4.1 Description of first aid measures**
- **General information:**

Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**5 Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**

Water haze  
Foam  
Fire-extinguishing powder  
Alcohol resistant foam  
Carbon dioxide
- **5.2 Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
CO2
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

**6 Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources.  
Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.

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**6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7 Handling and storage**

**7.1 Precautions for safe handling**

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

**7.2 Conditions for safe storage, including any incompatibilities**

**Information about fire - and explosion protection:**

Protect against electrostatic charges.

Keep ignition sources away - Do not smoke.

No special measures required.

**7.3 Specific end use(s) See §1.2**

**8 Exposure controls/personal protection**

**Additional information about design of technical facilities:** No further data; see item 7.

**8.1 Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

**107-21-1 ethanediol**

WEL	Short-term value: 104** mg/m <sup>3</sup> , 40** ppm Long-term value: 10* 52** mg/m <sup>3</sup> , 20** ppm Sk *particulate **vapour
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**DNELs**

**107-21-1 ethanediol**

Dermal	DNEL Long-term - Systemic (consumer)	53 mg/kg bw/day (/)
	DNEL Long-term - Systemic (worker)	106 mg/kg bw/day (/)
Inhalative	DNEL Long-term - Local (consumer)	7 mg/m <sup>3</sup> (/)
	DNEL Long-term - Local (worker)	35 mg/m <sup>3</sup> (/)

**532-32-1 sodium benzoate**

Oral	DNEL Long-term - Systemic (consumer)	25 mg/kg bw/day (/)
Dermal	DNEL Long-term - Local (consumer)	2.7 mg/kg bw/day (/)
	DNEL Long-term - Local (worker)	4.5 mg/kg bw/day (/)
	DNEL Long-term - Systemic (consumer)	20.8 mg/kg bw/day (/)
	DNEL Long-term - Systemic (worker)	34.7 mg/kg bw/day (/)
Inhalative	DNEL Long-term - Local (consumer)	1.3 mg/m <sup>3</sup> (/)

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	DNEL Long-term - Local (worker)	6.3 mg/m <sup>3</sup> (/)
	DNEL Long-term - Systemic (consumer)	2.1 mg/m <sup>3</sup> (/)
	DNEL Long-term - Systemic (worker)	10.4 mg/m <sup>3</sup> (/)
<b>12179-04-3 disodium tetraborate pentahydrate</b>		
Oral	DNEL Acute - Systemic (consumer)	1.15 mg/kg bw/day (/)
	DNEL Long-term - Systemic (consumer)	1.15 mg/kg bw/day (/)
Dermal	DNEL Long-term - Systemic (consumer)	231.8 mg/kg bw/day (/)
	DNEL Long-term - Systemic (worker)	458.2 mg/kg bw/day (/)
Inhalative	DNEL Acute - Local (consumer)	17.04 mg/m <sup>3</sup> (/)
	DNEL Acute - local (worker)	17.04 mg/m <sup>3</sup> (/)
	DNEL Long-term - Local (consumer)	17.04 mg/m <sup>3</sup> (/)
	DNEL Long-term - Local (worker)	17.04 mg/m <sup>3</sup> (/)
	DNEL Long-term - Systemic (consumer)	4.9 mg/m <sup>3</sup> (/)
	DNEL Long-term - Systemic (worker)	9.8 mg/m <sup>3</sup> (/)

· PNECs

**107-21-1 ethanediol**

PNEC Fresh water	10 mg/l (/)	
PNEC Marine water	1 mg/l (/)	
PNEC Soil	1.53 mg/kg (/)	
<b>12179-04-3 disodium tetraborate pentahydrate</b>		

PNEC Fresh water	2.02 mg/l (/)
PNEC Intermittent releases	13.7 mg/l (/)
PNEC Marine water	2.02 mg/l (/)
PNEC STP	10 mg/l (/)
PNEC Soil	5.4 mg/kg (/)

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· Respiratory protection: Not necessary if room is well-ventilated.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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**· Material of gloves**

EN374

Neoprene gloves

PVC gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**· Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**· Eye protection:**

EN 166



Tightly sealed goggles

**· Body protection:** Use protective suit.

**9 Physical and chemical properties**

**· 9.1 Information on basic physical and chemical properties**

**· General Information**

**· Appearance:**

**Form:** Fluid

**Colour:** Blue

Green in UK

**· Odour:** Recognizable

**· Odour threshold:** Not determined.

**· pH-value at 20 °C:** 7.2

**· Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

**Setting temperature / range:** -18 °C

**· Flash point:** 115 °C

**· Flammability (solid, gaseous):** Not applicable.

**· Auto-ignition temperature:**

**Decomposition temperature:** Not determined.

**· Self-igniting:** Product is not selfigniting.

**· Danger of explosion:** Product does not present an explosion hazard.

**· Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

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· <b>Vapour pressure at 20 °C:</b>	0.1 hPa
· <b>Density at 20 °C:</b>	1.1 g/cm <sup>3</sup>
· <b>Relative density</b>	<i>Not determined.</i>
· <b>Vapour density</b>	<i>Not determined.</i>
· <b>Evaporation rate</b>	<i>Not determined.</i>
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	<i>Not determined.</i>
· <b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not determined.</i>
<b>Kinematic:</b>	<i>Not determined.</i>
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>Solids content:</b>	4.0 %
· <b>9.2 Other information</b>	<i>No further relevant information available.</i>

## 10 Stability and reactivity

- **10.1 Reactivity** *Not determined.*
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:**
  - Strong oxidizing agents*
  - Strong Acids*
  - Nitrate*
- **10.6 Hazardous decomposition products:** *Aldehyde*

## 11 Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

**107-21-1 ethanediol**

Oral	LD50	>300 - ≤2000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)

**532-32-1 sodium benzoate**

Oral	LD50	3140 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

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Inhalative	LC50/4 h	>12.2 mg/l (rat)
<b>12179-04-3 disodium tetraborate pentahydrate</b>		
Oral	LD50	3200-3400 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50	>2.0 mg/l (rat)

**· Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful

**12 Ecological information**

**· 12.1 Toxicity**

**· Aquatic toxicity:**

**107-21-1 ethanediol**

EC 50 (48 u)	>100 mg/l ( <i>daphnia magna</i> )
EC 50 (96u)	6500-13000 mg/l ( <i>Pseudokirchneriella subcapitata</i> )
LC 50 (96 u)	72860 mg/l ( <i>Pimephales promelas</i> )

**532-32-1 sodium benzoate**

EC 50 (48 u)	>100 mg/l (/) >100 mg/l ( <i>daphnia magna</i> )
EC 50 (72u)	>100 mg/l ( <i>algae</i> )
LC 50 (96 u)	>100 mg/l ( <i>fish</i> )

**12179-04-3 disodium tetraborate pentahydrate**

EC 50 (24u)	242 mg/l ( <i>daphnia magna</i> )
LC 50	88 mg/l ( <i>Oncorhynchus mykiss</i> ) (24 days) 65 mg/l ( <i>Carassius auratus</i> ) (7 days)

**· 12.2 Persistence and degradability** No further relevant information available.

**· 12.3 Bioaccumulative potential** No further relevant information available.

**· 12.4 Mobility in soil** No further relevant information available.

**· Additional ecological information:**

**· General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

**· 12.5 Results of PBT and vPvB assessment**

**· PBT:** Not applicable.

**· vPvB:** Not applicable.

**· 12.6 Other adverse effects** No further relevant information available.

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**13 Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**14 Transport information**

· <b>14.1 UN-Number</b>	Void
· <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>14.2 UN proper shipping name</b>	Void
· <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>14.3 Transport hazard class(es)</b>	
· <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>Class</b>	Void
· <b>14.4 Packing group</b>	
· <b>ADR, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

**15 Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008 GHS label elements**
- **National regulations:**
- **Technical instructions (air):**

Class	Share in %
NK	96.0

- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**

12179-04-3 disodium tetraborate pentahydrate

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16 Other information

"The information provided in these documents is based on our present state of knowledge of the product and is given in good faith and to the best of our experience. However, it should not be construed as a technical specification or as guaranteeing specific properties. In no event we will be responsible for damages or effects of any nature whatsoever, either express or implied, resulting from the use of this information. It is the own responsibility of the consignee and the user of the product to comply with all prevailing and applicable laws, regulations and directives. They should also make their own determination as to the suitability of the product for a particular use or application."

### • Relevant phrases

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.*  
R22 *Harmful if swallowed.*  
R36 *Irritating to eyes.*  
R60 *May impair fertility.*  
R61 *May cause harm to the unborn child.*

### • Emergency Numbers

European Emergency Number: 112

AUSTRIA +43 1 40 400 2222  
BELGIUM/LUXEMBOURG +32 70 245 245  
BULGARIA +359 2 9154 409  
CZECH REPUBLIC +42 2 2491 9293 or +42 2 2491 5402  
DENMARK +45 82 12 12 12  
ESTONIA 16662 (24/5 9h00 monday till 9h00 Saturday)  
FINLAND +358 9 471 977  
FRANCE +33 1 40 05 48 48  
GERMANY +49 30 450 653565  
GREECE +30 10 779 3777  
HUNGARY +36 80 20 11 99  
IRELAND +353 1 8379964  
ITALY +39 06 305 4343  
LATVIA +371 704 2468  
LITHUANIA +370 2 36 20 52 or +370 2 36 20 92  
MALTA (+356) 21 247 860 or (+356) 21 241 251  
NORWAY 22 59 13 00  
NETHERLANDS +31 30 274 88 88  
POLAND +48 22 619 66 54 or +48 22 619 08 97  
PORTUGAL 808 250 143 or +351 21 330 3284  
ROMANIA +40 21 230 8000  
SLOVAKIA +421 2 54 77 4 166  
SLOVENIA +386 41 650 500  
SPAIN +34 937 192 561 (08:00-13:00 y 15:00-17:00 / viernes 08:00-15:00)  
SWEDEN +46 8 33 12 31  
UNITED KINGDOM 0870 243 2241 or +44 (0)20 7771 5310

### • Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

• \* Data compared to the previous version altered.

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