

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 14.12.2015

Version number 3

Revision: 14.12.2015

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

- **1.1 Product identifier**
- **Trade name:** *wabcothyl*™
- **Article number:** 830 702 087 4, 830 702 088 4, 830 702 089 4, 830 702 090 4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC4 Anti-Freeze and de-icing products
- **Application of the substance / the mixture** Antifreeze agent.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
WABCO Vertriebs GmbH & CO. KG  
Am Lindener Hafen 21  
30453 Hannover  
Germany  
Tel.: +49 511 922 0
- **Informing department:**  
Information available by telephone number for respective country given above.
- **1.4 Emergency telephone number:**  
Giftnotruf Berlin +49 (0) 30 30 686 790 (Deutsch und Englisch)

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**  
H225 Highly flammable liquid and vapour.
- **Precautionary statements**
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P240 Ground/bond container and receiving equipment.
  - P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
  - P403+P235 Store in a well-ventilated place. Keep cool.
  - 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.

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· vPvB: Not applicable.

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### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6	ethanol	⚠ Flam. Liq. 2, H225	50-100%
CAS: 107-21-1 EINECS: 203-473-3	ethanediol	⚠ Acute Tox. 4, H302	5-10%

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

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.  
Disziness  
Headache  
Disziness  
Breathing difficulty  
Unconsciousness  
Nausea
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
Alcohol resistant foam  
CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Can be released in case of fire  
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained breathing apparatus.  
Wear full protective suit.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Keep away from ignition sources  
Avoid contact with eyes and skin.

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Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:**

Do not allow to enter the ground/soil.

Prevent material from reaching sewage system, holes and cellars.

Do not allow to enter drainage system, 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).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

- **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 information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions necessary if used correctly.

- **Information about protection against explosions and fires:**

Use explosion-proof apparatus / fittings and spark-proof tools.

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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

- **Storage**

- **Requirements to be met by storerooms and containers:**

Keep away from heat and direct sunlight.

Store only in unopened original receptacles.

Provide solvent resistant, sealed floor.

Store in cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

- **Storage class 3**

- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

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

- **8.1 Control parameters**

- **Components with limit values that require monitoring at the workplace:**

<b>64-17-5 ethanol</b>	
WEL	Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm
<b>107-21-1 ethanediol</b>	
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

- **8.2 Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

Wash hands during breaks and at the end of the work.

- **Breathing equipment:** Filter A.

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- **Protection of hands:**  
Solvent resistant gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves** Nitrile rubber, NBR
- **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:** Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

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

##### · General Information

##### · Appearance:

<b>Form:</b>	Fluid
<b>Colour:</b>	Blue
<b>Odour:</b>	Alcohol-like

· **pH-value:** 5 - 7

##### · Change in condition

<b>Melting point/Melting range:</b>	-114 °C (Ethanol)
<b>Boiling point/Boiling range:</b>	78 °C (Ethanol)

· **Flash point:** 18 °C

· **Inflammability (solid, gaseous)** Not applicable.

· **Ignition temperature:** 410 °C

· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/steam mixtures is possible.

##### · Critical values for explosion:

<b>Lower:</b>	3,5 Vol %
<b>Upper:</b>	15,0 Vol %

· **Vapour pressure at 20 °C:** 59 hPa

<b>Density at 20 °C</b>	0,81 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.

##### · Solubility in / Miscibility with

**Water:** Miscible.

· **Partition coefficient (n-octanol/water):** -0,32 log POW (Ethanol)

##### · Viscosity:

<b>dynamic at 20 °C:</b>	1 mPas
<b>kinematic:</b>	Not determined.

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- **Solvent content:**
- Organic solvents:** 92,4 %
- **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **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.  
Heat, flames and sparks.  
sources of ignition.
- **10.5 Incompatible materials:**  
Avoid contact with strong oxidizing agents.  
Reaction with strong acids.
- **10.6 Hazardous decomposition products:**  
No decomposition with intended use and storage.  
No dangerous decomposition products known

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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.  
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

#### · 13.1 Waste treatment methods

##### · Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

The waste code numbers mentioned are recommendations based on the probable use of the product.

##### · European waste catalogue

07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 07 00	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 04*	other organic solvents, washing liquids and mother liquors

##### · Uncleaned packagings:

##### · Recommendation:

Packaging may be reused or recycled after cleaning.

Dispose of packaging according to regulations on the disposal of packagings.

### SECTION 14: Transport information

#### · 14.1 UN-Number

· **ADR,RID,ADN, IMDG, IATA** UN1170

#### · 14.2 UN proper shipping name

##### · ADR/RID/ADN

1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

##### · IMDG

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

##### · IATA

ETHANOL SOLUTION

#### · 14.3 Transport hazard class(es)

##### · ADR,RID,ADN, IMDG, IATA



##### · Class

3 Flammable liquids.

##### · Label

3

#### · 14.4 Packing group

##### · ADR,RID,ADN, IMDG, IATA

II

#### · 14.5 Environmental hazards:

##### · Marine pollutant:

No

#### · 14.6 Special precautions for user

Warning: Flammable liquids.

##### · Kemler Number:

33

##### · EMS Number:

F-E,S-E

#### · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

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· **Transport/Additional information:**

· **ADR/RID/ADN**

· **Limited quantities (LQ)** 1L

· **Transport category** 2

· **Tunnel restriction code** D/E

· **UN "Model Regulation":** UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II

### SECTION 15: Regulatory information

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

No further relevant information available.

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

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

· **Department issuing data specification sheet:**

The safety data sheets were drawn up in cooperation with the Umweltkanzlei Dr.Rhein Beratungs- und Prüfgesellschaft mbH, Phone: +49 5066 900990.

· **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 Harmonised System of Classification and Labelling of Chemicals

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

· **\* Data compared to the previous version altered.**

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