

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

- This product is designed for domestic and commercial applications. •

### 1.1 Product identifier

Trade name: **Chloraethyl / Ethylchlorid Dr. Henning**

Reference-no. / Update: 0053/35.0.12

CAS Number:

75-00-3

EC number:

200-830-5

Index number:

602-009-00-0

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

This product may only be used in the manner provided. A liability for improper application is excluded.

#### Sector of Use:

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category: PC0 Other

Process category: PROC11 Non industrial spraying

#### Application of the substance / the preparation:

(Please note the application instructions.)

Cooling spray

Uses advised against: Currently not defined.

### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

Dr. Georg Friedrich Henning

Chemische Fabrik Walldorf

Robert-Bosch-Strasse 62

D-69190 Walldorf

Tel.: -49- 6227 / 1278

FAX.: -49- 6227 / 30481

### 1.4 Emergency telephone number:

Tel.: -49- 6227 / 1278

### Poison Control Center:

(1231) 24 80 95

## SECTION 2: Hazards identification


### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

 GHS02 flame

Flam. Gas 1 H220 Extremely flammable gas.

Flam. Liq. 1 H224 Extremely flammable liquid and vapour.

 GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.

Press. Gas H280 Contains gas under pressure; may explode if heated.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The substance is classified and labelled according to the CLP regulation.

Hazard pictograms GHS02, GHS08

Signal word Danger

#### Hazard-determining components of labelling:

chloroethane

#### Hazard statements

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H224 Extremely flammable liquid and vapour.

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition.

No smoking.

#### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P281	Use personal protective equipment as required.
P240	Ground/bond container and receiving equipment.
P233	Keep container tightly closed.
P242	Use only non-sparking tools.
P273	Avoid release to the environment.
P243	Take precautionary measures against static discharge.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P370+P378	In case of fire: Use for extinction: CO <sub>2</sub> , powder or water spray.
P381	Eliminate all ignition sources if safe to do so.
P405	Store locked up.
P410	Protect from sunlight.
P403	Store in a well-ventilated place.
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 There are no other hazards known.  
Results of PBT and vPvB assessment Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.1 Chemical characterization: Substances

CAS No. Designation:  
75-00-3 chloroethane  
Identification number(s):  
EC number: 200-830-5  
Index number: 602-009-00-0

Dangerous components: Void

SVHC (substances of very high concern): The product contains no listed substances.

Regulation (EC) No 2032/2003 on biocidal-produkts / Labelling for contents:

Substance is not listed.

Additional information More informations about the ingredients can be found at [www.dguv.de / find\\_ifa / en / gestis / stoffdb / index.jsp](http://www.dguv.de/find_ifa/en/gestis/stoffdb/index.jsp).

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General information:



Remove the victim immediately from the danger area. If the patient is unwell consult a doctor and present this data sheet.

Instantly remove any clothing soiled by the product.

After inhalation:

Supply fresh air; consult doctor in case of symptoms.

In case of unconsciousness bring patient into stable side position for transport.

After skin contact: The product does not, generally speaking, cause skin irritation. Wash with water and soap and rinse well.

After eye contact: First, blow on the solution to speed up evaporation. Seek medical treatment.

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.

Information for doctor: None.

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:



CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents: Water with a full water jet.

#### 5.2 Special hazards arising from the substance or mixture

In case of fire the following gases are released:

Can form explosive gas-air mixtures.

Hydrogen chloride (HCl)

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### 5.3 Advice for firefighters

#### Protective equipment:

Do not inhale explosion gases or combustion gases.

Wear self-contained breathing apparatus.

#### Fire fighting information:

Cool containers with water jet. Transport containers can burst explosively due to severe heat.

Fire residues and contaminated extinguishing water must be disposed of in accordance with official regulations.

Collect contaminated extinguishing water separately, must not get into the sewerage system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

Remove unauthorised persons from the danger area.

6.2 Environmental precautions: Inform respective authorities in case product reaches water or sewage system.

### 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

### 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:

Keep containers tightly sealed.

Store in cool, dry place in tightly closed containers.

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care.



Do not eat, drink or smoke when processing the product.

### Information about protection against explosions and fires:

Do not spray on flames or red-hot objects.



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50°C. Do not open by force or throw into fire even after use.

When spraying is an increased risk of ignition.

### 7.2 Conditions for safe storage, including any incompatibilities:

#### Storage

#### Requirements to be met by storerooms and containers:

Store only in the original container.

Observe official regulations on storing packagings with pressurized containers.

According to the water pollution class (refer to WGK, item 12), the country-specific regulations for storage of water-polluting substances are to be complied with.

#### Information about storage in one common storage facility:



Do not store together with food, beverage or animal feed.

Store away from oxidizing agents.

Protect from light.

#### Further information about storage conditions:



Protect against frost, severe exposure to the sun and contaminants.

Recommended storage temperature: 5°C to 35°C

Storage class: 2 B

7.3 Specific end use(s): This product may be used only for described applications.

## SECTION 8: Exposure controls / personal protection

Additional information about design of technical systems: Provide good workplace ventilation/air extraction.

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**8.1 Control parameters**

Components with critical values that require monitoring at the workplace: Not required.

**DNELs:**

The values given for the "Derived-No-Effect-Level" are calculated for private consumers.

Not available.

PNECs: Not available.

Workplace exposure limits: Great Briain / EU

CAS No.	Designation of material	Type	Value	Unit
<b>75-00-3 chloroethane</b>				
	WEL (Great Britain)		Long-term value: 134 mg/m <sup>3</sup> , 50 ppm	
	IOELV (European Union)		Long-term value: 268 mg/m <sup>3</sup> , 100 ppm	

Additional information: The applicable WEL-list was used as the basis for the preparation and/or revision of this safety data sheet.

**8.2 Exposure controls**

**Personal protective equipment:**

**General protective and hygienic measures:**



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

Use skin protection cream for preventive skin protection.

Keep away from foodstuffs, beverages and animal feed.



Do not eat, drink, smoke or take snuff while working.

Use a moisturising skin cream after processing the product.

Breathing equipment: Filter AX.

**Protection of hands:**



Protective gloves.

Nitrile rubber 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:**

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.

Penetration time of glove material: The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

Butyl rubber, BR

Nitrile rubber, NBR

For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Not suitable are gloves made of the following materials:

Natural rubber, NR

Rubber gloves

Leather gloves

**Eye protection:**



Safety glasses.

Tightly sealed safety glasses.

**Body protection:**



Protective work clothing.

Light weight protective clothing

Solvent resistant protective clothing

**Risk management measures:**

There are no measures established for the risk management of ingredients according to Article 32 of Regulation (EC) No 1907/2006.

**SECTION 9: Physical and chemical properties**

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

**General Information**

**Appearance:**

Form: gasförmig od. flüssig

Colour: Colourless

Smell: Ether-like

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<b>pH-value:</b>	Not applicable.
<b>Change in condition:</b>	
Melting point/Melting range:	-142.5°C (DIN ISO 3016)
Boiling point/Boiling range:	12°C (-)
<b>Flash point:</b>	-43°C (DIN 51755 / EN ISO 2719)
<b>Fire Behavior:</b>	The product supports combustion.
<b>Inflammability (solid, gaseous):</b>	Extremely flammable liquefied gas.
<b>Ignition temperature:</b>	510°C (DIN 51794 / DIN EN 14 522)
<b>Self-inflammability:</b>	Product is not self-igniting.
<b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
<b>Critical values for explosion:</b>	
Lower:	3.6 Vol % (DIN 51649)
Upper:	14.8 Vol % (DIN 51649)
<b>Oxidizing properties:</b>	Product is not oxidizing.
<b>Steam pressure at 20°C:</b>	1342 hPa (DIN EN 12)
<b>Density at 20°C:</b>	0.92 g/cm <sup>3</sup> (DIN 51757)
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with Water at 20°C:</b>	5.8 g/l
<b>Viscosity:</b>	
dynamic:	Not determined.
kinematic:	Not determined.
<b>Flammable componentes:</b>	100.0 %
<b>Water:</b>	0.0 %
<b>9.2 Other information</b>	
<b>VOC (EU):</b>	917.1 g/l
<b>VOC (EU):</b>	100.00 %
<b>Remark:</b>	The product is not subject to the VOC Directive 2004/42 EU.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** The product reacts chemically with substances, listed in chapter 10.3.

**10.2 Chemical stability** The product is in compliance with the storage and processing conditions, chemically stable.

**Conditions to be avoided:**

No decomposition when properly stored and handled.

To avoid thermal decomposition do not overheat.

**10.3 Possibility of hazardous reactions**

Reacts with oxidizing agents

Reacts with alkaline metals

Reacts with alkaline earth metals

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** No further relevant information available.

**10.6 Hazardous decomposition products:**

Danger of toxic pyrolysis products.

Hydrogen chloride.

**Additional information:** There is no risk of decomposition or uncontrolled chemical reaction when the specified application conditions are complied with.

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity:**

**LD/LC50 values that are relevant for classification:**

Due to § 7(2) of the animal protection law (FRG), no toxicological examination on living organisms was performed for this product. The following listed data are values from the literature which are available to us of individual ingredients, which do not claim to be exhaustive.

Components	Type	Value	Species
<b>75-00-3 chloroethane</b>			
Inhalative	LC 50/4	160 mg/l/4h	(rat)

**Specific symptoms in biological assay:** We do not have any knowledge of this.

**Primary irritant effect:**

**on the skin:**

No primary irritant effect.

Skin irritation possible due to drying effect.

**on the eye:** No primary irritant effect.

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Sensitization: No sensitizing effect known.

Subacute to chronic toxicity:

Result: Repeated or prolonged skin contact may cause defatting of the skin and cause dermatitis. The skin can become sensitive to other irritants

Repeated dose toxicity: Not tested.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

The product contains CMR substances (see Chapter 3). There have been no tests.

Carc. 2

Listing:

Substance is listed.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity: The following values were obtained from the literature.

Type of test Effective concentration Method Assessment

#### 75-00-3 chloroethane

EC 50/48h 58 mg/l (Daphnia magna (großer Wasserfloh))

EC 50/72h 39 mg/l (Alge)

12.2 Persistence and degradability: No further relevant information available.

Evaluation text: We do not have any data on this point.

Other information: The product has good biodegradable properties. (7d:>80%)

12.3 Bioaccumulative potential:

#### 75-00-3 chloroethane

Bioaccum. 1.52 log Pow (n.a)

12.4 Mobility in soil: No further relevant information available.

Ecotoxicological effects:

Remark: Harmful to fish

Behaviour in sewage processing plants:

Comment: The product contains substances which cannot be broken down in water purification plants.

Other information: The product contains organically bound halogens. They contribute to the AOX value.

Additional ecological information:

COD-value: No data available.

According to recipe contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC: Halogenated hydrocarbons

General notes:

Harmful to aquatic organisms

Water hazard class 2 (Assessment by list): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

12.5 Results of PBT and vPvB assessment: Not applicable.

PBT:

Substance is not listed.

vPvB:

Substance is not listed.

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.

Waste disposal key number:

The classification in a waste code according to the European waste catalogue (EWC) is to be made in accordance with the regional responsible for waste disposal.

European waste catalogue

14 00 00 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08)

14 06 00 waste organic solvents, refrigerants and foam/aerosol propellants

14 06 02\* other halogenated solvents and solvent mixtures

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Uncleaned packagings:

Recommendation: Non-contaminated packagings can be used for recycling.




Recommended cleaning agent: Cleaning by recycler.

Cleaned/completely emptied packaging:



Packaging which does not exhibit any harmful adhering products (e.g. cured or cleaned) can be sent for reprocessing.

## SECTION 14: Transport information

14.1 UN-Number ADR, IMDG, IATA	UN1950
14.2 UN proper shipping name ADR IMDG IATA	1950 AEROSOLS AEROSOLS AEROSOLS, flammable
14.3 Transport hazard class(es) ADR  Class Label	2 5F Gases. 2.1
IMDG, IATA  Class Label	2.1 2.1
14.4 Packing group ADR, IMDG, IATA	Void
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user: Kemler Number: EMS Number:	Warning: Gases. - F-D,S-U
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
Transport/Additional information:	The shipment of this product via post is regulated.
ADR Limited quantities (LQ) Transport category Tunnel restriction code Remarks: Contains:	1L 2 D Water pollutant class: WGK 2 (water polluting substance) -
IMDG Remarks:	None.
IATA Comments: PI Ltd Qty:  Y 203 PI Pass.: PI Cargo:	Please note the general and specific packing instructions of IATA / ICAO.  203 203
UN "Model Regulation":	UN1950, AEROSOLS, 2.1

## SECTION 15: Regulatory information

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

National regulations National regulations are to be determined by the user's own responsibility.

United Kingdom: National regulations are unknown.

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15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

The above details are based on the latest state of our knowledge. Processing notes for this product are listed in a technical data sheet.

Existing laws, decrees and regulations, even those which are not stated in this data sheet are to be complied by the recipient of our products at his own responsibility.

### Training hints



In case of commercial use, employees are to be informed about the potential dangers every year.

### Note:

The informations about ingredients given in this data sheet are basing on the informations of our suppliers of raw materials. Despite careful handling, the completeness and correctness of these data can not be guaranteed. This is especially true for substances below their declaration limit and for substances without classification or without attribution to a CAS number.

Physical data were identified by the manufacturer of this product. They represent no assurance of product characteristics and establishes no legal contractual relationship.

The validity of this safety data sheet expires one year after its release.

### Abbreviations and acronyms:

IOELV: Indicative Occupational Exposure Limit Value (EU)

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

EINECS: European Inventory of Existing Commercial Chemical Substances

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

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

[\*] Those chapters marked with (\*) were changed to the previous version of this MSDS.