

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



**Trade name :** Hydro-Reiniger 5111 (5111.-.0100)  
mittelflüchtig, wassermischbar, farblos

**Revision date :** 05.10.2020

**Print date :** 05.10.2020

**Version (Revision) :** 6.0.0 (5.0.0)

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

### 1.1 Product identifier

Hydro-Reiniger 5111 (5111.-.0100)  
mittelflüchtig, wassermischbar, farblos

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

Detergent. Intended purpose see technical data sheet.

#### Relevant identified uses

##### Products Category [PC]

Coatings and paints, thinners, paint removers

#### Remark

The product is intended for professional use.

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

#### Supplier (manufacturer/importer/only representative/downstream user/distributor)

Brillux GmbH & Co. KG, Industrielack  
www.brillux-industrielack.de

**Street :** Otto-Hahn-Straße 14

**Postal code/city :** D-59423 Unna

**Telephone :** +49 2303 8805-0

**Telefax :** +49 2303 8805-119

**Information contact :** E-mail address of the competent person for safety data sheets: sdb@brillux-industrielack.de

### 1.4 Emergency telephone number

Giftinformationszentrum-Nord (poisons centre), consultation in german and english  
Telephone: +49 551 19 24 0

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

### 2.2 Label elements

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

##### Hazard pictograms



Exclamation mark (GHS07)

##### Signal word

Warning

##### Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

##### Precautionary statements

P264 Wash hands thoroughly after handling.

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

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P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## 2.3 Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

2-BUTOXYETHANOL ; REACH No. : 01-2119475108-36 ; EC No. : 203-905-0; CAS No. : 111-76-2

Weight fraction :  $\geq 20 - < 25$  %

Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319

#### Additional information

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Change contaminated, saturated clothing. When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice.

#### Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

#### In case of skin contact

Wash immediately with: Water and soap Rub greasy ointment into the skin.

#### After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye.

#### After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. No direct artificial respiration to be given by first aider.

### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

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

None

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Extinguishing powder, alcohol resistant foam, carbon dioxide (CO<sub>2</sub>), water spray.

#### Unsuitable extinguishing media

Full water jet

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

#### Hazardous combustion products

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In case of fire may be liberated: Nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and pyrolysis products, toxic.

## 5.3 Advice for firefighters

### Special protective equipment for firefighters

Use suitable breathing apparatus.

## 5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

Remove all sources of ignition. Provide adequate ventilation. See protective measures under point 7 and 8. Special danger of slipping by leaking/spilling product.

### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

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

#### For cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Ventilate affected area.

### 6.4 Reference to other sections

None

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Protective measures

Avoid: Inhalation of vapours or spray/mists, Skin contact, Eye contact. Only use the material in places where open light, fire and other flammable sources can be kept away. If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Never use pressure to empty container. Only allow access to authorised staff.

#### Measures to prevent fire

Keep away from sources of ignition - No smoking. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Take precautionary measures against static discharges. Wear anti-static footwear and clothing Use only antistatically equipped (spark-free) tools.

#### Environmental precautions

Provide for retaining containers, eg. floor pan without outflow.

#### Advices on general occupational hygiene

Wear personal protection equipment (refer to section 8). When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

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

#### Requirements for storage rooms and vessels

Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Floors should be impervious, resistant to liquids and easy to clean. Provide adequate ventilation as well as local exhaust at critical locations. Keep container tightly closed.

#### Hints on joint storage

**Storage class (TRGS 510) :** 10

**Do not store together with**

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Strong acid, strong alkali, oxidising agent, food and feedingstuffs.

### Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place.

**Protect against :** Heat. Humidity.

### 7.3 Specific end use(s)

Detergent. Intended purpose see technical data sheet.

### Industrial sector specific solutions

Note DGVU-Rule 100-500, section 2.29 (processing coating materials).

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

2-BUTOXYETHANOL ; CAS No. : 111-76-2

Limit value type (country of origin) : TRGS 900 ( D )  
Limit value : 10 ppm / 49 mg/m<sup>3</sup>  
Peak limitation : 2(II)  
Remark : H,Y  
Version : 29.03.2019

Limit value type (country of origin) : STEL ( EC )  
Limit value : 50 ppm / 246 mg/m<sup>3</sup>  
Remark : Skin  
Version : 20.06.2019

Limit value type (country of origin) : TWA ( EC )  
Limit value : 20 ppm / 98 mg/m<sup>3</sup>  
Remark : Skin  
Version : 20.06.2019

#### Biological limit values

2-BUTOXYETHANOL ; CAS No. : 111-76-2

Limit value type (country of origin) : TRGS 903 ( D )  
Parameter : Butoxy acetic acid / Urine (U) / At long term exposure: after several previous shifts  
Limit value : 100 mg/l  
Version : 29.03.2019

Limit value type (country of origin) : TRGS 903 ( D )  
Parameter : Butoxy acetic acid / Urine (U) / End of exposure or end of shift ; At long term exposure: after several previous shifts  
Limit value : 150 mg/g Kr  
Version : 29.03.2019

#### DNEL-/PNEC-values

##### DNEL/DMEL

2-BUTOXYETHANOL ; CAS No. : 111-76-2

Limit value type : DNEL/DMEL (Industrial)  
Exposure route : Dermal  
Exposure frequency : Short-term  
Limit value : 89 mg/kg

Limit value type : DNEL/DMEL (Industrial)  
Exposure route : Inhalation  
Exposure frequency : Short-term  
Limit value : 663 mg/m<sup>3</sup>

Limit value type : DNEL/DMEL (Industrial)  
Exposure route : Dermal  
Exposure frequency : Long-term

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Limit value : 75 mg/kg  
Limit value type : DNEL/DMEL (Industrial)  
Exposure route : Inhalation  
Exposure frequency : Long-term  
Limit value : 98 mg/m<sup>3</sup>

## PNEC

2-BUTOXYETHANOL ; CAS No. : 111-76-2

Limit value type : PNEC (Industrial)  
Exposure route : Water (Including sewage plant)  
Limit value : 8,8 mg/l  
Limit value type : PNEC (Industrial)  
Exposure route : Soil  
Limit value : 2,8 mg/kg

## 8.2 Exposure controls

### Personal protection equipment

#### Eye/face protection

##### Suitable eye protection

goggles (EN 166)

##### Remark

Note DGUV-Rule 112-192.

#### Skin protection

##### Hand protection

Use safety gloves according to EN 374. Suitable glove materials: fluoro-rubber, butyl-rubber or nitrile-rubber. Please pay attention to the glove penetration times of the substances named below in section 2, according to the glove manufactures.

**Remark :** After washing hands replace lost skin fat by fat containing skin creams. Note DGUV-Rule 112-195. Note TRGS 401.

##### Body protection

**Required properties :** Antistatic, non-melting.

**Recommended material :** Natural fibres (e.g. cotton), heat-resistant synthetic fibres.

**Remark :** Note DGUV-Rule 112-189. Note TRGS 401.

#### Respiratory protection

Respiratory protection necessary at: Insufficient ventilation, insufficient exhaust or spray application.

##### Suitable respiratory protection apparatus

Filter mask with filter type A for short-term work.

European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 provide filter recommendations.

##### Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Note TRGS 402.

#### Other protection measures

Technical measures and the application of suitable work processes have priority over personal protection equipment.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state :** Liquid

**Colour :** According to product identification.

#### Odour

Like solvent.

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## Safety characteristics

Melting point/freezing point :			No data available	
Initial boiling point and boiling range :	( 1013 hPa )	approx.	100	°C
Decomposition temperature :			No data available	
Flash point :		>	61	°C
Auto-ignition temperature :		>	240	°C
Lower explosion limit :		approx.	1,1	Vol-%
Upper explosion limit :		approx.	10,6	Vol-%
Vapour pressure :	( 50 °C )	approx.	123	hPa
Density :	( 20 °C )		0,9 - 1	g/cm <sup>3</sup>
Water solubility :	( 20 °C )		consolute miscible	
pH :			No data available	
log P O/W :			No data available	
Flow time :	( 20 °C )	<	20	s DIN-cup 4 mm
Viscosity :	( 23 °C )		No data available	
Cinematic viscosity :	( 40 °C )	<=	20,5	mm <sup>2</sup> /s
Odour threshold :			not relevant	
Relative vapour density :	( 20 °C )		No data available	
Vapourisation rate :			No data available	
Oxidising liquids :	Not oxidising.			

## 9.2 Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7).

### 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

No information available.

### 10.5 Incompatible materials

Exothermic reaction with: Alkali (lye), concentrated. Acid, concentrated. Oxidizing agent.

### 10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	2500 mg/kg
Parameter :	LD50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )
Exposure route :	Oral
Species :	Rat

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Effective dose : 1480 mg/kg

### Acute dermal toxicity

Parameter : ATEmix calculated  
Exposure route : Dermal  
Effective dose : 5500 mg/kg  
Parameter : LC50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : > 2000 mg/kg

### Acute inhalation toxicity

Parameter : ATEmix calculated  
Exposure route : Inhalation (vapour)  
Effective dose : 55 mg/l  
Parameter : LC50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : 800 ppm  
Exposure time : 8 h  
Parameter : LC50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Exposure route : Inhalation  
Species : Mouse  
Effective dose : 700 ppm  
Parameter : LC50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : 3,9 mg/l  
Exposure time : 8 h

### Corrosion

#### Irritation to respiratory tract

May cause respiratory irritation.

### STOT-single exposure

#### STOT SE 3

#### Narcotic effects

Vapours may cause drowsiness and dizziness.

## 11.3 Symptoms related to the physical, chemical and toxicological characteristics

#### In case of skin contact

Repeated exposure may cause skin dryness or cracking.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

##### Acute (short-term) fish toxicity

Parameter : LC50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Species : Oncorhynchus mykiss (Rainbow trout)  
Effective dose : 1474 mg/l  
Exposure time : 96 h

##### Chronic (long-term) fish toxicity

Parameter : NOEC ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Species : Brachydanio rerio (zebra-fish)  
Effective dose : > 100 mg/l  
Exposure time : 21 D

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**Acute (short-term) toxicity to crustacea**

Parameter : EC50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Species : Daphnia magna (Big water flea)  
Effective dose : 1550 mg/l  
Exposure time : 48 h

**Chronic (long-term) toxicity to crustacea**

Parameter : NOEC ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Species : Daphnia magna (Big water flea)  
Effective dose : 100 mg/l  
Exposure time : 21 D

**Acute (short-term) toxicity to aquatic algae and cyanobacteria**

Parameter : EbC50 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Species : Pseudokirchneriella subcapitata  
Effective dose : 911 mg/l  
Exposure time : 72 h

**Toxicity to microorganisms**

Parameter : EC0 ( 2-BUTOXYETHANOL ; CAS No. : 111-76-2 )  
Species : Pseudomonas putida  
Effective dose : > 700 mg/l  
Exposure time : 16 h

**12.2 Persistence and degradability**

**Biodegradation**

Biodegradable.

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6 Other adverse effects**

No information available.

**12.7 Additional ecotoxicological information**

**Additional information**

Do not allow uncontrolled discharge of product into the environment.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Dispose of waste according to applicable legislation.

**Directive 2008/98/EC (Waste Framework Directive)**

**Before intended use**

**Waste codes/waste designations according to EWC/AVV**

14 06 03\* (Other solvents and solvent mixtures)

**After intended use**

**Waste codes/waste designations according to EWC/AVV**

Uncleaned packaging: 15 01 10\* (Packaging containing residues of or contaminated by dangerous substances) Cleaned packaging: 15 01 04 (Metallic packaging)

**Other disposal recommendations**

Completely emptied packages can be recycled.

**13.2 Additional information**



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Note sections 7 and 8.

## SECTION 14: Transport information

### 14.1 UN number

No dangerous good in sense of these transport regulations.

### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

### 14.6 Special precautions for user

None

## SECTION 15: Regulatory information

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

#### EU legislation

##### Authorisations and/or restrictions on use

##### Restrictions on use

Use restriction according to REACH annex XVII, no. : 3

##### Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### National regulations

##### Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : 10 - 25 %

##### Water hazard class (WGK)

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

##### Other regulations, restrictions and prohibition regulations

Note TRGS 001. Note TRGS 400.

### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

## SECTION 16: Other information

### 16.1 Indication of changes

15. Restrictions on use

### 16.2 Abbreviations and acronyms

AwSV: Ordinance on plants for the handling of substances hazardous to water. BGR(I): Rule (Information) from the german employers liability insurance association. DGUV: German Statutory Accident Insurance. EWC: European Waste Catalogue.  
TRGS: German Technical Rule for Hazardous Substances. VCI: German chemical industry association.

### 16.3 Key literature references and sources for data

None

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No

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**1272/2008 [CLP]**

Calculation method.

**16.5 Relevant H- and EUH-phrases (Number and full text)**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

**16.6 Training advice**

None

**16.7 Additional information**

None

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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