

# Safety Data Sheet

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



**Trade name :** Hydro-2K-PUR-Grundierung 5704 (SORTE 5704)  
**Revision date :** 23.09.2019  
**Print date :** 23.09.2019

**Version (Revision) :** 11.0.0 (10.0.0)

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

### 1.1 Product identifier

Hydro-2K-PUR-Grundierung 5704 (SORTE 5704)

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

Waterborne coating. Intended purpose see technical data sheet.

#### Relevant identified uses

##### Product Categories [PC]

PC9 - Coatings and paints, fillers, putties, thinners

#### 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](mailto: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]

Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

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

##### Hazard pictograms



Environment (GHS09)

##### Hazard statements

H411 Toxic to aquatic life with long lasting effects.

##### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P391 Collect spillage.

### 2.3 Other hazards

None

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

TRIZINC BIS(ORTHOPHOSPHATE) ; REACH registration No. : 01-2119485044-40 ; EC No. : 231-944-3; CAS No. : 7779-90-0

Weight fraction :  $\geq 2,5 - < 5$  %

Classification 1272/2008 [CLP] : Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

ZINC OXIDE ; REACH registration No. : 01-2119463881-32 ; EC No. : 215-222-5; CAS No. : 1314-13-2

Weight fraction :  $< 0,25$  %

Classification 1272/2008 [CLP] : Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

#### 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 Do not wash with: Solvents/Thinner

#### 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

In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>), 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.

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## 5.4 Additional information

Burning produces heavy smoke. Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses.

## 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.

### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

### 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. Clean with detergents. Avoid solvent cleaners.

### 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 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.

#### 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

Floors should be impervious, resistant to liquids and easy to clean. Keep container tightly closed.

#### Hints on joint storage

**Storage class (TRGS 510) :** 12

#### Do not store together with

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, frost and humidity.

### 7.3 Specific end use(s)

Waterborne coating. Intended purpose see technical data sheet.

#### Industrial sector specific solutions

Note DGUV-Rule 100-500, section 2.29 (processing coating materials). Note DGUV-Rule 109-013.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### DNEL/DMEL and PNEC values

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## DNEL/DMEL

Limit value type : DNEL/DMEL (Industrial) ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Exposure route : Inhalation  
Exposure frequency : Long-term (repeated)  
Limit value : 5 mg/m<sup>3</sup>  
Limit value type : DNEL/DMEL (Industrial) ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 83 mg/kg  
Limit value type : DNEL/DMEL (Industrial) ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Exposure route : Inhalation  
Exposure frequency : Long-term (repeated)  
Limit value : 5 mg/m<sup>3</sup>  
Limit value type : DNEL/DMEL (Industrial) ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Exposure route : Dermal  
Exposure frequency : Long-term (repeated)  
Limit value : 83 mg/kg

## PNEC

Limit value type : PNEC (Industrial) ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Exposure route : Water (Including sewage plant)  
Limit value : 20,6 µg/l  
Limit value type : PNEC (Industrial) ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Exposure route : Soil  
Limit value : 35,6 mg/kg  
Limit value type : PNEC (Industrial) ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Exposure route : Water (Including sewage plant)  
Limit value : 20,6 µg/l  
Limit value type : PNEC (Industrial) ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Exposure route : Soil  
Limit value : 35,6 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 chapter 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

Combination filter mask A2-P2 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.

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## Remark

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

## Occupational exposure controls

### Technical measures to prevent exposure

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

product specific, characteristic.

#### Safety relevant basis data

Melting point/melting range :			not applicable	
Initial boiling point and boiling range :	( 1013 hPa )	>	100	°C
Decomposition temperature :			No data available	
Flash point :			not applicable	
Ignition temperature :			No data available	
Lower explosion limit :		approx.	0,7	Vol-%
Upper explosion limit :		approx.	8	Vol-%
Vapour pressure :	( 50 °C )	approx.	123	hPa
Density :	( 20 °C )		1,3 - 1,6	g/cm <sup>3</sup>
Water solubility :	( 20 °C )		consolute miscible	
pH :			7,5 - 8,5	
log P O/W :			No data available	
Flow time :	( 20 °C )		60 - 70	s DIN-cup 4 mm
Viscosity :	( 23 °C )		No data available	
Cinematic viscosity :	( 40 °C )	>	20,5	mm <sup>2</sup> /s
Solid content :			55 - 65	Wt %
Odour threshold :			No data available	
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

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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 effects

##### Acute oral toxicity

Parameter : ATEmix calculated  
Exposure route : Oral  
Effective dose : not relevant  
Parameter : LD50 ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Exposure route : Oral  
Species : Rat  
Effective dose : > 5000 mg/kg

##### Acute dermal toxicity

Parameter : ATEmix calculated  
Exposure route : Dermal  
Effective dose : not relevant  
Parameter : LD50 ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Exposure route : Dermal  
Species : Rat  
Effective dose : > 2000 mg/kg

##### Acute inhalation toxicity

Parameter : ATEmix calculated  
Exposure route : Inhalation (vapour)  
Effective dose : not relevant  
Parameter : LC50 ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : 5,7 mg/l

#### Irritant and corrosive effects

##### Irritation to respiratory tract

May cause respiratory irritation.

##### Practical experience/human evidence

The inhalation of dust/mist or aerosols causes irritation of the respiratory tract.

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

#### In case of skin contact

Frequently or prolonged contact with skin may cause dermal irritation.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

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

Parameter : LC50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Species : Oncorhynchus mykiss (Rainbow trout)  
Effective dose : 0,3 - 5,6 mg/l  
Exposure time : 96 h  
Parameter : LC50 ( ZINC OXIDE ; CAS No. : 1314-13-2 )  
Species : Oncorhynchus mykiss (Rainbow trout)  
Effective dose : 0,14 mg/l

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Exposure time : 96 h

### Acute (short-term) daphnia toxicity

Parameter : EC50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )

Species : Daphnia

Effective dose : 0,9 mg/l

Exposure time : 48 h

Parameter : EC50 ( ZINC OXIDE ; CAS No. : 1314-13-2 )

Species : Daphnia magna (Big water flea)

Effective dose : 0,17 mg/l

Exposure time : 48 h

### Acute (short-term) algae toxicity

Parameter : EC50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )

Species : Selenastrum capricornutum

Effective dose : 0,3 mg/l

Exposure time : 72 h

Parameter : IC50 ( ZINC OXIDE ; CAS No. : 1314-13-2 )

Species : Scenedesmus capricornutum

Effective dose : 0,14 mg/l

Exposure time : 72 h

## 12.2 Persistence and degradability

### Biodegradation

The solvent is biodegradable. In accordance with the required stability the product is poorly 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 according to legislation.

#### Product/Packaging disposal

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

##### Waste code product

EWC-Code: 08 01 11. Uncleaned packaging: EWC-Code: 15 01 10. Cleaned packaging: EWC-Code: 15 01 04.

##### Waste treatment options

##### Appropriate disposal / Package

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

### 13.2 Additional information

Note sections 7 and 8.

## SECTION 14: Transport information

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## 14.1 UN number

UN 3082

## 14.2 UN proper shipping name

### Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( TRIZINC BIS(ORTHOPHOSPHATE) · ZINC OXIDE )

### Sea transport (IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( TRIZINC BIS(ORTHOPHOSPHATE) )

### Air transport (ICAO-TI / IATA-DGR)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( TRIZINC BIS(ORTHOPHOSPHATE) · ZINC OXIDE )

## 14.3 Transport hazard class(es)

### Land transport (ADR/RID)

Class(es) : 9  
Classification code : M6  
Hazard identification number (Kemler No.) : 90  
Tunnel restriction code : -  
Special provisions : LQ 5 I · E 1 · ADR : - (SP 375 <= 5 l/kg)  
Hazard label(s) : 9 / N

### Sea transport (IMDG)

Class(es) : 9  
EmS-No. : F-A / S-F  
Special provisions : LQ 5 I · E 1 · IMDG : - (SP 2.10.2.7 <= 5 l/kg)  
Hazard label(s) : 9 / N

### Air transport (ICAO-TI / IATA-DGR)

Class(es) : 9  
Special provisions : E 1 · IATA : - (SP A197 <= 5 l/kg)  
Hazard label(s) : 9 / N

## 14.4 Packing group

III

## 14.5 Environmental hazards

Land transport (ADR/RID) : Yes  
Sea transport (IMDG) : Yes (P)  
Air transport (ICAO-TI / IATA-DGR) : Yes

## 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

##### Other regulations (EU)

##### 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) : 0,5 - 0,99 %

##### Water hazard class (WGK)

Class : 2 (Significant hazardous to water) Classification according to AwSV

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



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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 · 15. Water hazard class (WGK)

### 16.2 Abbreviations and acronyms

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

### 16.3 Key literature references and sources for data

None

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Calculation method.

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

H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

### 16.6 Training advice

None

### 16.7 Additional information

None

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.