

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)  
Revision date : 16.02.2023  
Print date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

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

### 1.1 Product identifier

PUR-Härter 5770, Farblos  
(5770.-.0030)

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

Hardener for 2C-PUR-paints

#### Relevant identified uses

##### Products Category [PC]

Coatings and paints, thinners, paint removers

#### Remark

The product is intended for professional use. It is not suitable for use in do-it-yourself applications.

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

#### Supplier

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

**Street :** Otto-Hahn-Straße 14

**Postal code/City :** D-59423 Unna (Germany)

**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]

Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.

Acute Tox. 4 ; H332 - Acute toxicity (inhalative) : Category 4 ; Harmful if inhaled.

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.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.

STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; May cause damage to organs through prolonged or repeated exposure.

### 2.2 Label elements

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

##### Hazard pictograms



Flame (GHS02) · Health hazard (GHS08) · Exclamation mark (GHS07)

##### Signal word

Warning

# Safety Data Sheet

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



**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)  
**Revision date :** 16.02.2023  
**Print date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

## Hazard components for labelling

REACTION MASS OF ETHYLBENZENE AND XYLENE  
HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2  
4-ISOCYANATOSULPHONYLTOLUENE ; CAS No. : 4083-64-1  
HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0

## Hazard statements

H226 Flammable liquid and vapour.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H332 Harmful if inhaled.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

## Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 Do not breathe vapours.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P312 Call a POISON CENTER or a doctor if you feel unwell.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

## Special rules for supplemental label elements for certain mixtures

EUH204 Contains isocyanates. May produce an allergic reaction.

## 2.3 Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Hazardous ingredients

REACTION MASS OF ETHYLBENZENE AND XYLENE ; REACH No. : 01-2119486136-34 ; EC No. : 905-588-0

Weight fraction :  $\geq 50 - < 55$  %  
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT RE 2 ; H373 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; REACH No. : 01-2119488934-20 ; EC No. : 500-060-2 ; CAS No. : 28182-81-2

Weight fraction :  $\geq 40 - < 45$  %  
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 STOT SE 3 ; H335

2-METHOXY-1-METHYLETHYL ACETATE ; REACH No. : 01-2119475791-29 ; EC No. : 203-603-9 ; CAS No. : 108-65-6

Weight fraction :  $\geq 5 - < 10$  %  
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 STOT SE 3 ; H336

4-ISOCYANATOSULPHONYLTOLUENE ; REACH No. : 01-2119980050-47 ; EC No. : 223-810-8 ; CAS No. : 4083-64-1

Weight fraction :  $\geq 0,5 - < 1$  %  
Classification 1272/2008 [CLP] : Resp. Sens. 1 ; H334 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 STOT SE 3 ; H335 Eye Irrit. 2 ; H319: C  $\geq 5$  % • Skin Irrit. 2 ; H315: C  $\geq 5$  % • STOT SE 3 ; H335: C  $\geq 5$  %

HEXAMETHYLENE-DI-ISOCYANATE ; REACH No. : 01-2119457571-37 ; EC No. : 212-485-8 ; CAS No. : 822-06-0

Weight fraction :  $\geq 0,05 - < 0,5$  %  
Classification 1272/2008 [CLP] : Acute Tox. 2 ; H330 Resp. Sens. 1 ; H334 Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335

# Safety Data Sheet

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



**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)  
**Revision date :** 16.02.2023  
**Print date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

Specific Conc. Limits : Resp. Sens. 1 ; H334: C ≥ 0,5 % • Skin Sens. 1 ; H317: C ≥ 0,5 %

## Additional information

For full text of Hazard- and EU Hazard-statements: 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 but breathing normally, 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.

#### Following 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

Formation of toxic gases is possible during heating or in case of fire: Carbon monoxide (CO.), nitrogen oxide (NO<sub>x</sub>), vapour of isocyanate and traces of hydrogen cyanide (HCN).

### 5.3 Advice for firefighters

#### Special protective equipment for firefighters

Use suitable breathing apparatus.

### 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

Provide adequate ventilation. See protective measures under point 7 and 8.

### 6.2 Environmental precautions

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)  
Revision date : 16.02.2023  
Print date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

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

Absorb with liquid binding material (i.e. sand, kieselgur, universal binder or sawdust). After approx. 1 hour put in waste container but do not close (CO<sub>2</sub> development). 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

The threshold limit values noted in Chapter 8 must be monitored. Avoid: Inhalation of vapours or spray/mists, Skin contact, Eye contact. 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. The air should be drawn away from the personnel handling the product. 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.

#### Advices on general occupational hygiene

Wear personal protection equipment (refer to section 8). Keep working clothes separately. Immediately remove all contaminated clothing. 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. In case of air intake: Danger of polymerisation.

#### Hints on joint storage

Storage class (TRGS 510) : 3

#### 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. Humidity.

### 7.3 Specific end use(s)

Hardener for 2C-PUR-paints

#### Industrial sector specific solutions

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

REACTION MASS OF ETHYLBENZENE AND XYLENE

Limit value type (country of origin) : TRGS 900 ( D )

Limit value : 100 ppm / 440 mg/m<sup>3</sup>

Peak limitation : 4

# Safety Data Sheet

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



**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)  
**Revision date :** 16.02.2023  
**Print date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

Remark : Xylol  
Version : 01.10.1993  
Limit value type (country of origin) : TRGS 900 ( D )  
Limit value : 20 ppm / 88 mg/m<sup>3</sup>  
Peak limitation : 2(II)  
Remark : Ethylbenzol H, Y, DFG  
Version : 01.10.1993  
Limit value type (country of origin) : STEL ( EC )  
Limit value : 200 ppm / 884 mg/m<sup>3</sup>  
Remark : Ethylbenzol H  
Version :  
Limit value type (country of origin) : TWA ( EC )  
Limit value : 100 ppm / 442 mg/m<sup>3</sup>  
Remark : Ethylbenzol H  
Version :  
2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6  
Limit value type (country of origin) : TRGS 900 ( D )  
Limit value : 50 ppm / 270 mg/m<sup>3</sup>  
Peak limitation : 1(I)  
Remark : Y  
Version : 02.07.2021  
Limit value type (country of origin) : STEL ( EC )  
Limit value : 100 ppm / 550 mg/m<sup>3</sup>  
Remark : Skin  
Version : 20.06.2019  
Limit value type (country of origin) : TWA ( EC )  
Limit value : 50 ppm / 275 mg/m<sup>3</sup>  
Remark : Skin  
Version : 20.06.2019  
HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0  
Limit value type (country of origin) : TRGS 900 ( D )  
Limit value : 0,005 ppm / 0,035 mg/m<sup>3</sup>  
Peak limitation : 1/=2=(I)  
Remark : Sa  
Version : 02.07.2021

## Biological limit values

### REACTION MASS OF ETHYLBENZENE AND XYLENE

Limit value type (country of origin) : TRGS 903 ( D )  
Parameter : Xylene / Whole blood (B) / End of exposure or end of shift  
Limit value : 0,15 mg/dl  
Remark : Xylol  
Version : 01.10.1993  
Limit value type (country of origin) : TRGS 903 ( D )  
Parameter : Methylhippuric (toluric) acid (all isomers) / Urine (U) / End of exposure or end of shift  
Limit value : 2 g/l  
Remark : Xylol  
Version : 01.10.1993  
Limit value type (country of origin) : TRGS 903 ( D )  
Parameter : Ethylbenzene / Whole blood (B) / End of exposure or end of shift  
Limit value : 1 mg/l  
Remark : Ethylbenzol  
Version : 01.10.1993  
Limit value type (country of origin) : TRGS 903 ( D )

# Safety Data Sheet

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



**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)

**Revision date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

**Print date :** 16.02.2023

Parameter : Mandelic acid plus phenylglyoxylic acid / Urine (U) / End of exposure or end of shift  
Limit value : 800 mg/g Creatinine  
Remark : Ethylbenzol  
Version : 01.10.1993

HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0

Limit value type (country of origin) : TRGS 903 ( D )

Parameter : Hexamethylenediamine (after hydrolysis) / Urine (U) / End of exposure or end of shift  
Limit value : 0,15 mg/g Creatinine  
Version : 04.05.2021

## DNEL-/PNEC-values

### DNEL/DMEL

REACTION MASS OF ETHYLBENZENE AND XYLENE

Limit value type : DNEL Consumer (local)  
Exposure route : Inhalation  
Exposure frequency : Long-term  
Limit value : = 65,3 mg/m<sup>3</sup>  
Limit value type : DNEL Consumer (local)  
Exposure route : Inhalation  
Exposure frequency : Short-term  
Limit value : = 260 mg/m<sup>3</sup>  
Limit value type : DNEL Consumer (systemic)  
Exposure route : Oral  
Exposure frequency : Long-term  
Limit value : = 1,6 mg/kg  
Assessment factor : 1 D  
Limit value type : DNEL Consumer (systemic)  
Exposure route : Inhalation  
Exposure frequency : Long-term  
Limit value : = 14,8 mg/m<sup>3</sup>  
Limit value type : DNEL Consumer (systemic)  
Exposure route : Inhalation  
Exposure frequency : Short-term  
Limit value : = 260 mg/m<sup>3</sup>  
Limit value type : DNEL worker (local)  
Exposure route : Inhalation  
Exposure frequency : Short-term  
Limit value : = 289 mg/m<sup>3</sup>  
Limit value type : DNEL worker (local and systemic)  
Exposure route : Inhalation  
Exposure frequency : Long-term  
Limit value : = 221 mg/m<sup>3</sup>  
Limit value type : DNEL worker (systemic)  
Exposure route : Inhalation  
Exposure frequency : Long-term  
Limit value : = 211 mg/m<sup>3</sup>  
Limit value type : DNEL worker (systemic)  
Exposure route : Inhalation  
Exposure frequency : Short-term  
Limit value : = 442 mg/m<sup>3</sup>  
Limit value type : DNEL worker (systemic)  
Exposure route : Dermal  
Exposure frequency : Long-term  
Limit value : = 180 mg/kg  
Assessment factor : 1 D

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)

Revision date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

Print date : 16.02.2023

HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2

Limit value type : DNEL/DMEL (Worker)

Exposure route : Inhalation

Exposure frequency : Short-term

Limit value : 0,7 mg/m<sup>3</sup>

Limit value type : DNEL/DMEL (Worker)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 0,35 mg/m<sup>3</sup>

2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6

Limit value type : DNEL/DMEL (Consumer)

Exposure route : Dermal

Exposure frequency : Long-term

Limit value : 54,8 mg/kg

Limit value type : DNEL/DMEL (Consumer)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 33 mg/m<sup>3</sup>

Limit value type : DNEL/DMEL (Consumer)

Exposure route : Oral

Exposure frequency : Long-term

Limit value : 1,67 mg/kg

Limit value type : DNEL/DMEL (Industrial)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 275 mg/m<sup>3</sup>

Limit value type : DNEL/DMEL (Industrial)

Exposure route : Dermal

Exposure frequency : Long-term

Limit value : 153,5 mg/kg

HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0

Limit value type : DNEL/DMEL (Industrial)

Exposure route : Dermal

Exposure frequency : Short-term

Limit value type : DNEL/DMEL (Industrial)

Exposure route : Inhalation

Exposure frequency : Short-term

Limit value : 0,07 mg/m<sup>3</sup>

Limit value type : DNEL/DMEL (Industrial)

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 0,035 mg/m<sup>3</sup>

## PNEC

REACTION MASS OF ETHYLBENZENE AND XYLENE

Limit value type : PNEC (Aquatic, freshwater)

Exposure route : Water (Including sewage plant)

Limit value : 0,327 mg/l

Limit value type : PNEC (Aquatic, marine water)

Exposure route : Water (Including sewage plant)

Limit value : = 0,327 mg/l

Limit value type : PNEC (Sediment, freshwater)

Exposure route : Water (Including sewage plant)

Limit value : 12,64 mg/kg

Limit value type : PNEC (Sediment, marine water)

Exposure route : Water (Including sewage plant)

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)

Revision date : 16.02.2023

Print date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

Limit value : = 12,64 mg/kg  
Limit value type : PNEC soil  
Exposure route : Soil  
Limit value : 2,31 mg/kg  
Limit value type : PNEC (Sewage treatment plant)  
Exposure route : Water (Including sewage plant)  
Limit value : 6,58 mg/l  
HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2  
Limit value type : PNEC (Aquatic, freshwater)  
Exposure route : Water (Including sewage plant)  
Limit value : 0,1 mg/l  
Limit value type : PNEC Intermittierende Einleitung  
Exposure route : Water (Including sewage plant)  
Limit value : 1 mg/l  
Limit value type : PNEC (Aquatic, marine water)  
Exposure route : Water (Including sewage plant)  
Limit value : 0,01 mg/l  
Limit value type : PNEC (Sediment, freshwater)  
Exposure route : Soil  
Limit value : 2530 mg/kg  
Limit value type : PNEC (Sediment, marine water)  
Exposure route : Soil  
Limit value : 253 mg/kg  
Limit value type : PNEC soil  
Exposure route : Soil  
Limit value : 505 mg/kg  
Limit value type : PNEC (Sewage treatment plant)  
Exposure route : Water (Including sewage plant)  
Limit value : 100 mg/l  
2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6  
Limit value type : PNEC (Aquatic, freshwater)  
Exposure route : Water (Including sewage plant)  
Limit value : 0,635 mg/l  
Limit value type : PNEC (Aquatic, marine water)  
Exposure route : Water (Including sewage plant)  
Limit value : 0,0635 mg/l  
Limit value type : PNEC (Sediment, freshwater)  
Exposure route : Soil  
Limit value : 3,29 mg/kg  
Limit value type : PNEC (Sediment, marine water)  
Exposure route : Soil  
Limit value : 0,329 mg/kg  
Limit value type : PNEC soil  
Exposure route : Soil  
Limit value : 29 mg/kg  
Limit value type : PNEC (Sewage treatment plant)  
Exposure route : Water (Including sewage plant)  
Limit value : 100 mg/l

## 8.2 Exposure controls

### Personal protection equipment

#### Eye/face protection

##### Suitable eye protection

goggles

##### Recommended eye protection articles



# Safety Data Sheet

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



**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)  
**Revision date :** 16.02.2023  
**Print date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

EN 166

## Remark

Note DGUV-Rule 112-192.

## Skin protection

### Hand protection

At use as agreed a protective gloves from nitrile rubber with a material thickness 0,38 mm has to be used. Notes of the manufacturer have to be taken into account. Penetration time of the glove material: > = 60 min.

By longer or repeated contact the penetration times can be considerably shorter. The protective gloves should be replaced after the first wear out or a damage of the gloves.

**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.

### 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.

## 8.3 Additional information

In case of hypersensitivity of the respiratory tract and skin (e.g. asthmatics and those who suffer from chronic bronchitis and chronic skin complaint) it is inadvisable to work with the product.

## 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.

#### Safety characteristics

<b>Melting point/freezing point :</b>			not applicable	
<b>Initial boiling point and boiling range :</b>	( 1013 hPa )	>	100	°C
<b>Decomposition temperature :</b>			No data available	
<b>Flash point :</b>		>	23 - 60	°C
<b>Auto-ignition temperature :</b>		>	300	°C
<b>Lower explosion limit :</b>		ca	1	Vol-%
<b>Upper explosion limit :</b>		ca	10	Vol-%
<b>Vapour pressure :</b>	( 50 °C )	<	100	hPa
<b>Density :</b>	( 20 °C )		0,98 - 1,2	g/cm <sup>3</sup>
<b>Solvent separation test :</b>	( 20 °C )	<	3	%
<b>Water solubility :</b>	( 20 °C )		practically insoluble	
<b>pH :</b>			No data available	
<b>Flow time :</b>	( 20 °C )	<	60	s
				DIN-cup 4 mm

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)

Revision date : 16.02.2023

Print date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

Kinematic viscosity : ( 23 °C ) > 20,5 mm<sup>2</sup>/s

Solid content : No data available

## 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

CO<sub>2</sub> formation by penetration of the container with moisture.

### 10.3 Possibility of hazardous reactions

Exothermic reaction with alcohols and amines. With water gradual CO<sub>2</sub> separation. Build-up of pressure in closed containers: Danger that they might burst.

### 10.4 Conditions to avoid

In case of air intake: Danger of polymerisation.

### 10.5 Incompatible materials

No information available.

### 10.6 Hazardous decomposition products

When exposed to high temperatures (> 200 °C) or in case of fire hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen may produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	not relevant
Parameter :	LD50 ( REACTION MASS OF ETHYLBENZENE AND XYLENE )
Exposure route :	Oral
Species :	Rat
Effective dose :	3523 - 4000 mg/kg
Parameter :	LD50 ( HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2 )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5665 mg/kg
Parameter :	LD50 ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )
Exposure route :	Oral
Species :	Rat
Effective dose :	8500 mg/kg
Parameter :	LD50 ( 4-ISOCYANATOSULPHONYLTOLUENE ; CAS No. : 4083-64-1 )
Exposure route :	Oral
Species :	Rat
Effective dose :	2330 mg/kg
Parameter :	LD50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )
Exposure route :	Oral
Species :	Rat
Effective dose :	710 mg/kg

##### Acute dermal toxicity

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)

Revision date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

Print date : 16.02.2023

---

Parameter : ATEmix calculated  
Exposure route : Dermal  
Effective dose : 2146 mg/kg  
Parameter : LD50 ( REACTION MASS OF ETHYLBENZENE AND XYLENE )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : 12126 mg/kg  
Parameter : LD50 ( HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2 )  
Exposure route : Dermal  
Species : Rat  
Effective dose : > 2000 mg/kg  
Parameter : LD50 ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )  
Exposure route : Dermal  
Species : Rat  
Effective dose : > 5000 mg/kg  
Parameter : LD50 ( 4-ISOCYANATOSULPHONYLTOLUENE ; CAS No. : 4083-64-1 )  
Exposure route : Dermal  
Species : Rat  
Effective dose : > 2000 mg/kg  
Parameter : LD50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : 570 mg/kg

## Acute inhalation toxicity

Parameter : ATEmix calculated  
Exposure route : Inhalation (vapour)  
Effective dose : 11,3 mg/l  
Parameter : LC50 ( REACTION MASS OF ETHYLBENZENE AND XYLENE )  
Exposure route : Inhalation (vapour)  
Species : Rat  
Effective dose : 10 - 20 mg/l  
Exposure time : 4 h  
Parameter : ATEmix calculated ( HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2 )  
Exposure route : Inhalation (dust/mist)  
Effective dose : 1,5 mg/l  
Parameter : LC50 ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : 35,7 mg/l  
Parameter : LC50 ( 4-ISOCYANATOSULPHONYLTOLUENE ; CAS No. : 4083-64-1 )  
Exposure route : Inhalation  
Parameter : LC50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : 0,124 mg/l  
Exposure time : 4 h  
Parameter : LC50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )  
Exposure route : Inhalation  
Species : Mouse  
Effective dose : 1,57 mg/l

## Corrosion

### Irritation to respiratory tract

May cause respiratory irritation.

**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)  
**Revision date :** 16.02.2023  
**Print date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

## 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.

## 11.5 Additional information

Special properties/effects: Over-exposure entails the risk of concentration-dependent irritating effects on eyes, nose throat, and respiratory tract. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons may suffer from these effects even at low isocyanate concentrations, including concentrations below the UK Workplace Exposure Limit (WEL). Prolonged contact with the skin may cause tanning and irritant effects.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

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

Parameter :	LC50 ( REACTION MASS OF ETHYLBENZENE AND XYLENE )
Species :	Acute (short-term) fish toxicity
Evaluation parameter :	Oncorhynchus mykiss
Effective dose :	= 2,6 mg/l
Exposure time :	96 h
Parameter :	LC50 ( HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2 )
Species :	Danio rerio (zebrafish)
Effective dose :	> 100 mg/l
Exposure time :	96 h
Parameter :	LC50 ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )
Species :	Oryzias latipes (Ricefish)
Effective dose :	> 100 mg/l
Exposure time :	96 h
Parameter :	LC50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )
Species :	Danio rerio (zebrafish)
Effective dose :	22 mg/l
Exposure time :	96 h

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

Parameter :	NOEC ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )
Species :	Oryzias latipes (Ricefish)
Effective dose :	47,5 mg/l
Exposure time :	14 D

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

Parameter :	LC50 ( REACTION MASS OF ETHYLBENZENE AND XYLENE )
Species :	Acute (short-term) toxicity to crustacea
Evaluation parameter :	Daphnia magna
Effective dose :	= 1 mg/l
Exposure time :	24 h
Parameter :	EC50 ( HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2 )
Species :	Daphnia magna (Big water flea)
Effective dose :	> 100 mg/l
Exposure time :	48 h
Parameter :	EC50 ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)

Revision date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

Print date : 16.02.2023

Species : Daphnia magna (Big water flea)  
Effective dose : > 500 mg/l  
Exposure time : 48 h

### Chronic (long-term) toxicity to aquatic invertebrate

Parameter : NOEC ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )  
Species : Daphnia magna (Big water flea)  
Effective dose : > 100 mg/l  
Exposure time : 21 D

### Acute (short-term) toxicity to algae and cyanobacteria

Parameter : EC50 ( REACTION MASS OF ETHYLBENZENE AND XYLENE )  
Species : Scenedesmus capricornutum  
Evaluation parameter : Acute (short-term) toxicity to algae and cyanobacteria  
Effective dose : = 2,2 mg/l  
Exposure time : 73 h  
Parameter : ErC50 ( HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2 )  
Species : Scenedesmus subspicatus  
Effective dose : 50 - 100 mg/l  
Exposure time : 72 h  
Parameter : EC50 ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )  
Species : Pseudokirchneriella subcapitata  
Effective dose : > 1000 mg/l  
Exposure time : 3 h

### Toxicity to microorganisms

Parameter : EC50 ( HEXAMETHYLENE-1,6-DIISOCYANATE, HOMOPOLYMER ; CAS No. : 28182-81-2 )  
Species : Mysisopsis bahia  
Effective dose : 5560 mg/l  
Parameter : EC50 ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )  
Species : Mysisopsis bahia  
Effective dose : > 1000 mg/l  
Exposure time : 0,5 h

### Sewage treatment plant

Parameter : Effects in sewage plants ( REACTION MASS OF ETHYLBENZENE AND XYLENE )  
Inoculum : Activated sludge  
Effective dose : = 16 mg/l  
Exposure time : 28 D

## 12.2 Persistence and degradability

Is converted in connection with water in a solid, insoluble and inert polyurea, liberating CO<sub>2</sub>.

### Biodegradation

Parameter : Biodegradation ( REACTION MASS OF ETHYLBENZENE AND XYLENE )  
Inoculum : Biodegradation  
Evaluation parameter : Aerobic  
Degradation rate : = 90 %  
Test duration : 28 D  
Parameter : Biodegradation ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )  
Inoculum : Biodegradation  
Degradation rate : 100 %  
Test duration : 8 D  
Parameter : Biodegradation ( 2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6 )  
Inoculum : Biodegradation  
Degradation rate : > 90 %  
Test duration : 28 D

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

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)  
Revision date : 16.02.2023  
Print date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

## 12.3 Bioaccumulative potential

Parameter : Bioconcentration factor (BCF) ( REACTION MASS OF ETHYLBENZENE AND XYLENE )  
Bioconcentration factor (BCF)  
Value : = 25,9

## 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

08 05 01\* (Waste isocyanates)

##### 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. Handle contaminated packages in the same way as the substance itself.

### 13.2 Additional information

Note sections 7 and 8.

## SECTION 14: Transport information

### 14.1 UN number

UN 1263

### 14.2 UN proper shipping name

#### Land transport (ADR/RID)

PAINT RELATED MATERIAL

#### Sea transport (IMDG)

PAINT RELATED MATERIAL

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

PAINT RELATED MATERIAL

### 14.3 Transport hazard class(es)

#### Land transport (ADR/RID)

Class(es) : 3

Classification code : F1

Hazard identification number (Kemler

No.) : 30

Tunnel restriction code : D/E

# Safety Data Sheet

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



Trade name : PUR-Härter 5770, Farblos  
(5770.-.0030)  
Revision date : 16.02.2023  
Print date : 16.02.2023

Version (Revision) : 17.0.0 (16.0.0)

**Special provisions :** LQ 5 I · E 1  
**Hazard label(s) :** 3  
**Sea transport (IMDG)**  
**Class(es) :** 3  
**EmS-No. :** F-E / S-E  
**Special provisions :** LQ 5 I · E 1  
**Hazard label(s) :** 3  
**Air transport (ICAO-TI / IATA-DGR)**  
**Class(es) :** 3  
**Special provisions :** E 1  
**Hazard label(s) :** 3

## 14.4 Packing group

III

## 14.5 Environmental hazards

Land transport (ADR/RID) : No

Sea transport (IMDG) : No

Air transport (ICAO-TI / IATA-DGR) : No

## 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, 40, 74, 75

###### 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

Classification according to AwSV - Class : 2 (Obviously hazardous to water)

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

Note TRGS 001. Note TRGS 400. Note TRGS 430 - isocyanate. Note BG RCI M 044 (BGI 524) "Polyurethan-production and processing / Isocyanate" and M 017 (BGI 621) "Solvents".

### 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out.

### 15.3 Additional information

The European Committee of Paint, Printing Ink and Artists' Colours Manufacturers' Associations (CEPE) provides the following information on coatings containing isocyanates: Ready-to-use paints containing isocyanates may have an irritant effect on mucous membranes - especially on breathing organs - and cause hypersensitivity reactions. Inhalation of vapor or spray mist may cause sensitisation. When handling paints containing isocyanates all precautions required for solvent-containing paints must be followed. Vapor and spray mist in particular should not be inhaled. Allergics and asthmatics as well as people prone to respiratory ailments should not work with isocyanate containing paints.

## SECTION 16: Other information

# Safety Data Sheet

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



**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)

**Revision date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

**Print date :** 16.02.2023

### 16.1 Indication of changes

None

### 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. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route)

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany) AOX: Adsorbable Organic halogen compounds

ATEmix: Calculated acute toxicity estimate of mixture

BCF: Bio-Concentration Factor

CAS: Chemical Abstract Service

CLP: Classification, Labelling and Packaging

CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction

CSR: Chemical Safety Report

DNEL: Derived No Effect Level

EC: European Commission

EC50: Effective Concentration 50%

ECHA: European Chemical Agency

EEC: European Economic Community

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

EWC: European Waste Catalogue

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IC50: Inhibition Concentration 50%

IMDG Code: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

LC50: Lethal concentration 50%

LD50: Lethal Dose 50%

LOAEL: Lowest Observed Adverse Effect Level

LOEL: Lowest observable effect level

MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG)

MARPOL: Convention for the Prevention of Marine Pollution from Ships

MVZ: molar ratio

n.a.: Not applicable

n.d.: Not determined

n.r.: Not relevant

NLP: No Longer Polymers

NOAEC: No Observed Adverse Effect Concentration

NOAEL: No Observed Adverse Effect Level

NOEC: No Observed Effect Concentration

NOEL: No Observed Effect Level

OEL: Occupational Exposure Limit

PBT: Persistent, bioaccumulative, toxic

PNEC: Predicted No Effect Concentration

RCP: Reciprocal calculation procedure

REACH: Registration, Evaluation and Authorization of Chemical

RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer)

STEL: Short-term Exposure Limit

SVHC: Substance of Very High Concern

TLV - TWA: Threshold Limit Value - Time Weighted Average

VOC: Volatile Organic Compounds

vPvB: Very persistent, very bioaccumulative.



# Safety Data Sheet

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



**Trade name :** PUR-Härter 5770, Farblos  
(5770.-.0030)

**Revision date :** 16.02.2023

**Version (Revision) :** 17.0.0 (16.0.0)

**Print date :** 16.02.2023

---

## 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)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

## 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.

---