

# Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

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

- **1.1 Product identifier**
- **Product name** B4 Härter Hardener WS 2K Contact
- **Article number:** 11521-B4-000
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Hardening agent/ Curing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
LOBA GmbH & Co. KG  
Leonberger Straße 56 - 62  
D-71254 Ditzingen  
United Kingdom:  
Phi House  
Southampton Science Park  
Southampton, SO167NS  
United Kingdom  
Phone +442380766722
- **1.4 Emergency telephone number:**  
Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

Tel.: +49 (0)7156/357-0

## SECTION 2: Hazards identification

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



Acute Tox. 4 H332 Harmful if inhaled.  
 Eye Irrit. 2 H319 Causes serious eye irritation.  
 Skin Sens. 1 H317 May cause an allergic skin reaction.  
 STOT SE 3 H335 May cause respiratory irritation.

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



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**  
hexamethylendiisocyanate oligomers, isocyanurate  
2-butoxyethyl acetate  
cyclohexyldimethylamine  
hexamethylene diisocyanate
- **Hazard statements**  
H332 Harmful if inhaled.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H335 May cause respiratory irritation.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

(Contd. on page 2)

GB

# Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

**Product name B4 Härter Hardener WS 2K Contact**

(Contd. of page 1)

- P280 Wear protective gloves / eye protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**  
EUH204 Contains isocyanates. May produce an allergic reaction.
  - **2.3 Other hazards**
  - **Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions.

### · **Dangerous components:**

CAS: 28182-81-2 EC number: 931-274-8 Reg.nr.: 01-2119485796-17	hexamethylendiisocyanate oligomers, isocyanurate ⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
CAS: 112-07-2 EINECS: 203-933-3 Index number: 607-038-00-2 Reg.nr.: 01-2119475112-47-xxxx	2-butoxyethyl acetate ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	5-8.5%
CAS: 9046-01-9	poly(oxy-1,2-ethanediyl), α-tridecyl-ω-hydroxy-, phosphate ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; Aquatic Chronic 3, H412	≥1-<2.5%
CAS: 98-94-2 EINECS: 202-715-5 Reg.nr.: 01-2119533030-60	cyclohexyldimethylamine ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411	≥0.25-<1%
CAS: 822-06-0 EINECS: 212-485-8 Index number: 615-011-00-1 Reg.nr.: 01-2119457571-37-0000/5/6	hexamethylene diisocyanate ⚠ Acute Tox. 1, H330; ⚠ Resp. Sens. 1, H334; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Resp. Sens. 1; H334: C ≥ 0.5% Skin Sens. 1; H317: C ≥ 0.5 %	<0.1%

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

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation**  
Supply fresh air and call for doctor for safety reasons.  
In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact** Wash off immediately with soap and water and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** In case of persistent symptoms consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** Symptom Treat ommatically.

GB

(Contd. on page 3)

# Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

Product name B4 Härter Hardener WS 2K Contact

(Contd. of page 2)

## 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.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or water bodies.  
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).  
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.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class 10**
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

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

### 112-07-2 2-butoxyethyl acetate

WEL	Short-term value: 332 mg/m <sup>3</sup> , 50 ppm
	Long-term value: 133 mg/m <sup>3</sup> , 20 ppm
Sk	

- **Ingredients with biological limit values:**

### 822-06-0 hexamethylene diisocyanate

BMGV	1 µmol creatinine/mol
	Medium: urine
	Sampling time: At the end of the period of exposure
	Parameter: isocyanate-derived diamine

- **Additional information:** The lists that were valid during the compilation were used as basis.

(Contd. on page 4)

GB

# Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

**Product name B4 Härter Hardener WS 2K Contact**

(Contd. of page 3)

## · 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures**

Instantly remove any soiled and impregnated garments.

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

· **Breathing equipment:**

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

· **Hand protection**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Nitrile rubber, NBR

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Recommended thickness of the material:  $\geq 0.4$  mm

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).

Value for the permeation: Level  $\leq 6$

· **Eye/face protection** Safety glasses recommended during refilling.

## SECTION 9: Physical and chemical properties

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

· **General Information**

· **Physical state**

Fluid

· **Colour:**

According to product specification

· **Smell:**

Characteristic

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Not determined

· **Boiling point or initial boiling point and boiling range**

Not determined

· **Flammability**

Not applicable.

· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Flash point:**

65 °C (DIN EN ISO 3679, 111109-77-4 1-methoxy-3-(3-methoxypropoxy)-propane)

· **Decomposition temperature:**

Not determined.

· **pH**

Not determined.

· **Viscosity:**

· **Kinematic viscosity at 20 °C**

18 s (DIN 53211/4)

· **dynamic:**

Not determined.

· **Solubility**

· **Water:**

Not miscible or difficult to mix

· **Partition coefficient n-octanol/water (log value)**

Not determined.

· **Steam pressure:**

Not determined.

· **Density and/or relative density**

· **Density at 20 °C**

1.07 g/cm<sup>3</sup> (Dichtekugel 10ml 20°C)

(Contd. on page 5)

# Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

**Product name B4 Härter Hardener WS 2K Contact**

(Contd. of page 4)

· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Particle characteristics</b>	not applicable, as liquid
<b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Self-inflammability:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive.
· <b>Solids content:</b>	69.0 %
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.
<b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	Void

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with alcohols, amines, aqueous acids and alkalis  
Reacts with water  
Danger of bursting
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

## SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Harmful if inhaled.

<b>LD/LC50 values that are relevant for classification:</b>		
<b>28182-81-2 hexamethylendiisocyanate oligomers, isocyanurate</b>		
Oral	LD50	>2,500 mg/kg (rat)

(Contd. on page 6)

GB

## Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

**Product name B4 Härter Hardener WS 2K Contact**

(Contd. of page 5)

Dermal	LD50	>2,000 mg/kg (rat)
<b>112-07-2 2-butoxyethyl acetate</b>		
Oral	LD50	2,400 mg/kg (rat)
Dermal	LD50	1,580 mg/kg (rabbit)
<b>9046-01-9 poly(oxy-1,2-ethanediyl), <math>\alpha</math>-tridecyl-<math>\omega</math>-hydroxy-, phosphate</b>		
Dermal	LD50	>2,000 mg/kg (kan)
<b>98-94-2 cyclohexyldimethylamine</b>		
Oral	LD50	272 mg/kg (rat)
Dermal	LD50	370 mg/kg (rat)
Inhalative	LC50/4 h	4.45 mg/l (rat)
<b>822-06-0 hexamethylene diisocyanate</b>		
Oral	LD50	959 mg/kg (rat)
	ATE	746 mg/kg (rec)
Dermal	LD50	>7,000 mg/kg (rat)
Inhalative	LC50/4 h	0.124 mg/l (rat)
	ATE	0.124 mg/l (rec)

- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **STOT-single exposure** May cause respiratory irritation.
- **11.2 Information on other hazards**

· <b>Endocrine disrupting properties</b>
--

None of the ingredients is listed.
------------------------------------

### SECTION 12: Ecological information

#### · 12.1 Toxicity

##### · Aquatic toxicity:

<b>9046-01-9 poly(oxy-1,2-ethanediyl), <math>\alpha</math>-tridecyl-<math>\omega</math>-hydroxy-, phosphate</b>
---

EC50/48 h	10 mg/L (fish)
-----------	----------------

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
- The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**

Water hazard class 2 (Self-assessment): 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.

Harmful to aquatic organisms

GB

(Contd. on page 7)

## Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

**Product name B4 Härter Hardener WS 2K Contact**

(Contd. of page 6)

### 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.  
After prior treatment product has to be landfilled or incinerated under adherence to the regulations pertaining to the disposal of especially hazardous waste.

##### · Uncleaned packagings:

· **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

#### · 14.1 UN number or ID number

· ADR, IMDG, IATA Void

#### · 14.2 UN proper shipping name

· ADR, IMDG, IATA Void

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

· ADR, ADN, IMDG, IATA

· Class Void

#### · 14.4 Packing group

· ADR, IMDG, IATA Void

#### · 14.5 Environmental hazards:

Not applicable.

#### · 14.6 Special precautions for user

Not applicable.

#### · 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

#### · UN "Model Regulation":

Void

### SECTION 15: Regulatory information

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

##### · Poisons Act

##### · Regulated explosives precursors

None of the ingredients is listed.

##### · Regulated poisons

None of the ingredients is listed.

##### · Reportable explosives precursors

None of the ingredients is listed.

##### · Reportable poisons

None of the ingredients is listed.

#### · Directive 2012/18/EU

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

#### · National regulations

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

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

GB

(Contd. on page 8)

# Safety data sheet according to UK REACH

Printing date 16.07.2024

Version number 8 (replaces version 7)

Revision: 16.07.2024

Product name **B4 Härter Hardener WS 2K Contact**

(Contd. of page 7)

## SECTION 16: Other information

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

Alteration in the context will be marked with a cross (\*).

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

### · Relevant phrases

H226 Flammable liquid and vapour.  
H301 Toxic if swallowed.  
H302 Harmful if swallowed.  
H311 Toxic in contact with skin.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H331 Toxic if inhaled.  
H332 Harmful if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
EUH204 Contains isocyanates. May produce an allergic reaction.

### · Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

### · Department issuing data specification sheet: Product safety

### · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 3: Flammable liquids – Category 3  
Acute Tox. 3: Acute toxicity – Category 3  
Acute Tox. 1: Acute toxicity – Category 1  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Resp. Sens. 1: Respiratory sensitisation – Category 1  
Skin Sens. 1: Skin sensitisation – Category 1  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2  
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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