

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) and Regulation (EU) 2020/878



BLOCK BOND® HOOF ADHESIVE Isocyanate/ KLAUENKLEBSTOFF Isocyanat

Material number HOOF-ADHESIVE_ISOCYANATE

Version: 3.1
Replaces version: 3.0

Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 1 of 10
Language: en-IE

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

1.1 Product identifier

Trade name: BLOCK BOND® HOOF ADHESIVE Isocyanate/ KLAUENKLEBSTOFF Isocyanat

This safety data sheet pertains to the following product:
BLOCK BOND® HOOF ADHESIVE Isocyanate

UFI: K3K0-40A8-G008-NNS2

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

General use: Isocyanate component for a 2-component adhesive
Reserved for industrial and professional use.

Uses advised against: Do not use for private purposes (household).

1.3 Details of the supplier of the safety data sheet

Company name: WIKO Klebetechnik Sp. z o.o.
Street/POB-No.: ul. Ekonomiczna 8
Postal Code, city: PL-42-271 Czestochowa
WWW: www.gluetec-group.com
E-mail: info.pl@gluetec-group.com
Telephone: +48 (0) 34 372 58 58
Telefax: +48 (0) 34 371 11 14

Department responsible for information:
Telephone: +48 (0) 34 372 58 58, E-mail: info.pl@gluetec-group.com

1.4 Emergency telephone number

**GIZ-Nord, Göttingen, Germany,
Telephone: +49 551-19240**

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Acute Tox. 4; H332 Harmful if inhaled.
Skin Sens. 1; H317 May cause an allergic skin reaction.
STOT SE 3; H335 May cause respiratory irritation.

2.2 Label elements

Labelling (CLP)



Signal word: **Warning**

Hazard statements:	H317	May cause an allergic skin reaction.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.

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Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 2 of 10
Language: en-IE

Precautionary statements:	P261	Avoid breathing mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection.
	P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P312	Call a POISON CENTER/doctor if you feel unwell.
	P362+P364	Take off contaminated clothing and wash it before reuse.
	P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Special labelling

Text for labelling: EUH204 Contains isocyanates. May produce an allergic reaction.
Contains Hexamethylene-1,6-di-isocyanate homopolymer

2.3 Other hazards

Special danger of slipping by leaking/spilling product.
Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

The product does not contain any as PBT or vPvB classified substances.

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Hexamethylene-1,6-di-isocyanate-homopolymer

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2119485796-17-xxxx EC No. 500-060-2 CAS 28182-81-2	Hexamethylene-1,6-di-isocyanate homopolymer Acute Tox. 4; H332. Skin Sens. 1; H317. STOT SE 3; H335.	90 - 100 %

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:	If medical advice is needed, have product container or label at hand. Take off immediately all contaminated clothing and wash it before reuse.
In case of inhalation:	Move victim to fresh air; if necessary, provide artificial respiration or oxygen. If victim is at risk of losing consciousness, position and transport on their side. Seek medical attention.
Following skin contact:	After contact with skin, wash immediately with soap and plenty of water. In case of skin reactions, consult a physician.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.
After swallowing:	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Seek medical attention.

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Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 3 of 10
Language: en-IE

4.2 Most important symptoms and effects, both acute and delayed

May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. Delayed occurrence of discomfort and development of hypersensitivity are possible even at low concentrations of isocyanates.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. First Aid, Decontamination.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray jet, extinguishing powder, Foam, carbon dioxide.

Extinguishing media which must not be used for safety reasons:
Full water jet

5.2 Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. In case of fire may be liberated: toxic gases/vapours, Isocyanate vapours, traces of hydrogen cyanide, nitrous fumes, carbon monoxide, carbon dioxide. With air, vapours form potentially explosive mixtures, which are heavier than air.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

Do not allow fire water to penetrate into surface or ground water.

Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with the substance. Avoid breathing mist/vapours/spray. Wear appropriate protective equipment. Provide for sufficient ventilation, particularly in closed rooms. Keep unprotected people away. Take off immediately all contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains.
In case of release, notify competent authorities.

6.3 Methods and material for containment and cleaning up

Cover with moist liquid binding material (e.g. sand, chemical agent with calcium silicahydrate). After approximately 1 hour, mechanically collect in an open waste container (CO₂ build-up).
keep moist and allow to stand in a secure area for 7 to 14 days.
Thoroughly clean surrounding area.

In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information:

Remove all sources of ignition.

Special danger of slipping by leaking/spilling product.

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Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 4 of 10
Language: en-IE

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.
Avoid the formation of aerosol. Avoid breathing mist/vapours/spray.
Avoid contact with skin and eyes. Take off immediately all contaminated clothing and wash it before reuse.
Keep work clothes separately.
When using do not eat, drink or smoke. Wear appropriate protective equipment. Wash hands before breaks and after work. Protect skin by using skin protective cream. Persons with over-sensitive breath ways (e.g. asthma, chronic bronchitis) are not allowed to use the product due to safety regulations.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take action to prevent static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight.
Store containers in upright position.
Suitable material for containers/equipment: aluminium, steel, refined steel
Unsuitable container/equipment material: copper, tin
Only use containers specifically approved for the substance/product.
Flexible containers: Store under protective gas (nitrogen).

Hints on joint storage:

Do not store together with combustible or self-igniting materials or any highly flammable solids.
Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information: Contains no substances with occupational exposure limit values.

DNEL/DMEL: Information about Hexamethylene-1,6-di-isocyanate-homopolymer:
DNEL long-term, workers, inhalative, local: 0.5 mg/m³
DNEL short-term, workers, inhalative, local: 1 mg/m³

PNEC: Information about Hexamethylene-1,6-di-isocyanate-homopolymer:
PNEC water (freshwater): 0.127 mg/L
PNEC sediment (freshwater): 266,701 mg/kg dw
PNEC water (marine water): 0.0127 mg/L
PNEC sediment (marine water): 26,670 mg/kg dw
PNEC water (intermittent release): 1.27 mg/L
PNEC sewage treatment plant: 88 mg/L
PNEC soil: 53,183 mg/kg dw

SAFETY DATA SHEET

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Material number HOOF-ADHESIVE_ISOCYANATE

Version: 3.1
Replaces version: 3.0

Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 5 of 10
Language: en-IE

8.2 Exposure controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment.
When aerosols and vapours form: Withdraw by suction.

Personal protection equipment

Occupational exposure controls

- Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded.
Respiratory protection: A2/P2 or better, depending on the operational load.
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.
- Hand protection: Protective gloves according to EN 374.
Glove material: butyl caoutchouc (butyl rubber) - Layer thickness: > 0.5 mm
Breakthrough time: > 480 min
Glove material: fluoro rubber - Layer thickness: > 0.4 mm
Breakthrough time: > 480 min
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Eye protection: Tightly sealed goggles according to BS EN ISO 16321-1:2022.
- Body protection: Wear suitable protective clothing.
- General protection and hygiene measures:
Persons with over-sensitive breath ways (e.g. asthma, chronic bronchitis) are not allowed to use the product due to safety regulations. Avoid contact with skin, eyes, and clothing. Take off immediately all contaminated clothing and wash it before reuse. Avoid breathing mist/vapours/spray. Wash hands before breaks and after work. When using do not eat, drink or smoke. Work place should be equipped with a shower and an eye rinsing apparatus.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	liquid
Colour:	colourless
Odour:	almost odourless
Odour threshold:	not determined
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	not applicable, Decomposition
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Flash point/flash point range:	(DIN EN 22719)
Decomposition temperature:	No data available
pH:	No data available
Viscosity, kinematic:	No data available
Water solubility:	at 15 °C: immiscible
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	at 20 °C: 0.007 hPa (Hexamethylene-1,6-di-isocyanate) at 20 °C: <= 0.00003 hPa (Hexamethylene-1,6-di-isocyanate-homopolymer)
Density:	No data available

SAFETY DATA SHEET

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Material number HOOF-ADHESIVE_ISOCYANATE

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Replaces version: 3.0

Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 6 of 10
Language: en-IE

Vapour density: No data available
Particle characteristics: Not applicable

9.2 Other information

Explosive properties: not determined
Oxidizing characteristics: not determined
Auto-ignition temperature: not applicable
Drop point/drop range: (ISO 3016)
Evaporation rate: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms carbon dioxide and turns into a hard and insoluble by-product (poly urea) on the water's edge.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Exothermic reactions with: Water, alcohols, amines, bases
Formation of Carbon dioxide. Danger of bursting of closed cans.

10.4 Conditions to avoid

Keep away from sources of ignition - No smoking. Keep away from heat sources, sparks and open flames.
Protect from direct sunlight.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Exothermal decomposition with formation of: toxic gases/vapours, nitrogen oxides (NO_x), carbon monoxide and carbon dioxide.

Thermal decomposition: No data available

SAFETY DATA SHEET

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Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 7 of 10
Language: en-IE

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

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

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Specific symptoms in animal studies (Rabbit): mild irritant

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

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

Sensitization: Specific symptoms in animal studies (Guinea pig): positive (maximisation test, OECD 406)

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Based on available data, the classification criteria are not met.

genotoxicity, in-vitro: Ames test, Salmonella typhimurium: negative (OECD 471)

genotoxicity, in-vivo: Micronucleus test:, Mouse: negative (OECD 474)

Effects on or via lactation: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure): STOT SE 3; H335 = May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Lack of data.

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Other information:

Information about Hexamethylene-1,6-di-isocyanate homopolymer:

LD50 rat, oral: > 2,500 mg/kg (OECD 423)

LD50 Rabbit, dermal: > 2,000 mg/kg (OECD 402)

LC50 rat, inhalative: 1.5 mg/l/4h (dust/mist)

General remarks

Delayed occurrence of discomfort and development of hypersensitivity are possible even at low concentrations of isocyanates.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

Information about Hexamethylene-1,6-di-isocyanate homopolymer:

Fish toxicity:

LC50 Danio rerio (zebrafish): > 100 mg/L/96 h (RL 67/548/EWG)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): > 100 mg/L/48 h (RL 67/548/EWG)

Algae toxicity:

ErC50 Scenedesmus subspicatus: > 1,000 mg/L/72 h (RL 67/548/EWG)

Bacterial toxicity:

EC50 in activated sludge: > 3,828 mg/L/3 h (OECD 209, read across)

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Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 8 of 10
Language: en-IE

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Information about Hexamethylene-1,6-di-isocyanate homopolymer:
Biodegradation: 1 %/28 d, not easily bio-degradable (RL 67/548/EWG)
Bioconcentration factor (BCF): Information about Hexamethylene-1,6-di-isocyanate homopolymer:
Bioconcentration factor (BCF): 3.2 (calculated)

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

The product does not contain any as PBT or vPvB classified substances.

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

General information: Forms carbon dioxide and turns into a hard and insoluble by-product (poly urea) on the water's edge.
Based upon current knowledge, poly urea is inert and will not decompose.
Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 08 05 01* = Waste isocyanates
* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation. Incinerate as hazardous waste according to applicable local, state, and federal regulations. Discharge into the environment must be avoided.

Package

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID, IMDG, IATA-DGR: not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR: Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR: not applicable

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Replaces version: 3.0

Revision date: 24/2/2023
Date of print: 9/5/2023

Page: 9 of 10
Language: en-IE

14.4 Packing group

ADR/RID, IMDG, IATA-DGR: not applicable

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant: no

14.6 Special precautions for user

Protect from humidity. Sensitive to heat and warmth
Keep away from food, drink and animal feedingstuffs.
Von Säuren und Laugen fernhalten.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

National regulations - EC member states

Labelling of packaging with <= 125mL content



Signal word:

Warning

Hazard statements:

H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary statements:

EUH204 Contains isocyanates. May produce an allergic reaction.
P261 Avoid breathing mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3, 75

15.2 Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
Hexamethylene-1,6-di-isocyanate homopolymer

SECTION 16: Other information

Wording of the H-phrases under paragraph 2 and 3:

H317 = May cause an allergic skin reaction.
H332 = Harmful if inhaled.
H335 = May cause respiratory irritation.
EUH204 = Contains isocyanates. May produce an allergic reaction.

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Page: 10 of 10
Language: en-IE

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Date of first version: **11/10/2021**
Department issuing data sheet: **see section 1: Department responsible for information**

Abbreviations and acronyms:

- Acute Tox.: Acute toxicity
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- AS/NZS: Australian Standards/New Zealand Standards
- BCF: Bioconcentration Factor
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC: European Community
- EC50: Effective Concentration 50%
- EN: European Standard
- EQ: Excepted quantities
- EU: European Union
- IATA: International Air Transport Association
- IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- LC50: Median lethal concentration
- LD50: Lethal dose 50%
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- OECD: Organisation for Economic Co-operation and Development
- OEL: Occupational Exposure Limit Value
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- Skin Sens.: Skin sensitisation
- STOT SE: Specific target organ toxicity - single exposure
- TLV: Threshold Limit Value
- TRGS: Technical Rules for Hazardous Substances
- vPvB: Very persistent and very bioaccumulative
- WEL: Workplace Exposure Limit

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

Most recent product information is available at
<http://sumdat.net/cgctn2gw>

