

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 08.09.2020

Revision: 08.09.2020

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

- **1.1 Product identifier**
- **Trade name:** HADALAN BMIK 32P
- **Article number:** 40219
- **UFI:** VXC0-H0QF-T009-SP6P
- **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**  
1-component polyurethane resin as bonding agent for natural stone and decorative quartz linings in the outdoors, contains solvent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Sievert Baustoffe GmbH & Co. KG  
Mühlenschweg 6  
D-49090 Osnabrück  
Tel.: +49 2363 5663-0
- **Further information obtainable from:**  
Abteilung: Produktsicherheit  
Tel. +49 2363 5663-0  
info-hahne@sievert.de
- **1.4 Emergency telephone number:**  
Giftnormales Zentrum Nord (GIZ Nord) Universität Göttingen,  
Tel.: 0551-19240

**SECTION 2: Hazards identification**

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



GHS02 flame

Flam. Liq. 3      H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1      H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Skin Irrit. 2      H315 Causes skin irritation.

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.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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

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· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** *Danger*· **Hazard-determining components of labelling:**

IPDI-Prepolymer 2

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Bis[2-[2-(1-methylethyl)-3-oxazolidinyl]ethyl] hexane-1,2-diylbiscarbamat

hexahydromethylphthalic anhydride

· **Hazard statements**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P260 Do not breathe mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

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

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

· **Additional information:**

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 Chemical characterisation: Mixtures**· **Description:** Polyurethane prepolymer, containing solvents· **Dangerous components:**

CAS: 68957-72-2	IPDI-Prepolymer 2 ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
CAS: 93763-35-0 EINECS: 297-854-1	Hydrocarbons, C9-16, hydrotreated, dearomatized ⚠ Asp. Tox. 1, H304	10-25%
CAS: 59719-67-4	Bis[2-[2-(1-methylethyl)-3-oxazolidinyl]ethyl] hexane-1,2-diylbiscarbamat ⚠ Aquatic Chronic 2, H411; ⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	10-25%
EC number: 918-668-5	Kohlenwasserstoffe, C9, Aromaten (Alkyl C3 benzenes, cymenes) ⚠ Flam. Liq. 3, H226; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H335-H336	2.5-10%
CAS: 4098-71-9 EINECS: 223-861-6	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate ⚠ Acute Tox. 3, H331; ⚠ Resp. Sens. 1, H334; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	<0.5%

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CAS: 108-94-1 EINECS: 203-631-1	cyclohexanone ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 3, H311; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	<1.0%
CAS: 25550-51-0 EINECS: 247-094-1	hexahydromethylphthalic anhydride ⚠ Resp. Sens. 1, H334; ⚠ Eye Dam. 1, H318; ⚠ Skin Sens. 1, H317	<0.25%
· <b>SVHC</b>		
25550-51-0	hexahydromethylphthalic anhydride	

· **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 to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Immediately dexamethasone spray (Auxilison, Pumocrt) inhale. Patient to fresh air, seek medical attention  
Inhalation.

##### · **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

##### · **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Unaffected eye protect, remove contact lenses.

##### · **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

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

No further relevant information available.  
· **Information for doctor:**  
Symptoms: After prolonged exposure to mild skin irritation possible. With aspiration can occur edema and pneumonia.

Irritating: on the skin and mucous membranes, has a narcotic effect. Decontamination, symptomatic treatment. After swallowing Induce vomiting or gastric lavage with enclosing administration of activated charcoal and sodium sulfate (each 1 tablespoon to 1/4 liter of water). Do not give adrenaline or derivatives. A toxic pulmonary edema can be detected radiographically at an early stage in a chest x-ray about 8 hours after inhalation (periphiläre turbidity). For comparison, therefore, a chest radiograph is recommended as soon as possible after inhalation, if the risk of pulmonary edema is suspected.

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

No further relevant information available.

### SECTION 5: Firefighting measures

#### · 5.1 Extinguishing media

· **Suitable extinguishing agents:** Water spray, foam, powder, CO2

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

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

During heating or in case of fire poisonous gases are produced.

Case of fire, CO2, CO and nitrous gases possible.

Product reacts with water. Prevent ingress of water into the product and product containers - bursting through decomposition. Prevent spreading of vapors or product from reaching sewage system - risk of explosion. Spilled not burning product cover with foam. Affected by the fire cool, undamaged containers with water spray.

#### · 5.3 Advice for firefighters

##### · **Protective equipment:**

Mount respiratory protective device.

Use self contained breathing apparatus.

· **Additional information** Contaminated extinguishing water separately.

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## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Prevent seepage into sewage system, workpits and cellars.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
Clean on exit / discharge larger amounts of soil surface and discard.
- **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 disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Facilities, equipment, containers tightly closed.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool, dry place.  
Keep ignition sources away.
- **Information about storage in one common storage facility:** Do not store together with food and beverages.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**Kohlenwasserstoffe, C9, Aromaten (Alkyl C3 benzenes, cymenes) (2.5-10%)**

TRGS 900 Langzeitwert 8h/100 mg/m<sup>3</sup>

**4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate (< 2.5%)**

WEL: 0.092 mg/m<sup>3</sup>, 0.01 ppm  
DFG

**108-94-1 cyclohexanone (1%)**

WEL Long-term value: 80 mg / m<sup>3</sup>, 20 ml / m<sup>3</sup>  
I (I); AGS, EU, H, Y

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

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- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
*Keep away from foodstuffs, beverages and feed.*  
*Immediately remove all soiled and contaminated clothing*  
*Wash hands before breaks and at the end of work.*  
*Do not inhale gases / fumes / aerosols.*  
*Avoid contact with the eyes and skin.*
- **Respiratory protection:**  
*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*  
*In inadequately ventilated places require respiratory protection. Recommendation: filter type A (B), possibly with P3.*
- **Protection of hands:**  
*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**  
*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: nitrile gloves or butyl rubber.*
- **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.*
- **Eye protection:** *Tightly sealed goggles*
- **Body protection:** *Protective work clothing.*

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification according to product specification
- **Odour:** Type specific, after solvent
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	140 °C
- **Flash point:** >35 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 450 °C
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

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· <b>Explosion limits:</b>	
<b>Lower:</b>	0.7 Vol %
<b>Upper:</b>	7.5 Vol %
· <b>Vapour pressure at 20 °C:</b>	>10 hPa
· <b>Density at 20 °C:</b>	1.1 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic at 20 °C:</b>	2,500 mPas
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>VOC (EU)</b>	<200 g/l
· <b>9.2 Other information</b>	No further relevant information available.

### 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.  
Incomplete combustion of carbon monoxide, oxides of nitrogen. Violent reaction with strong oxidizing agents.  
Reacts with: amines, strong bases, alcohols, and under CO<sub>2</sub> capture with water and carboxylic acid.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Water, strong oxidizing agents, amines, alcohols, strong bases.
- **10.6 Hazardous decomposition products:**  
No decomposition if used according to specifications.  
In combustion emits toxic fumes of carbon monoxide, carbon dioxide.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.  
Irritant
- **Serious eye damage/irritation**  
Causes serious eye irritation.  
Irritant
- **Respiratory or skin sensitisation**  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.

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- **STOT-single exposure**  
May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** Biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Other information:** Forms solid reaction product with water.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
Must not be disposed together with household garbage. Do not empty into drains.  
Cover spillage with moist absorbent material (sand, sawdust, general-purpose binder). Record after about 1 hour transfer to waste container and do not seal (evolution of CO<sub>2</sub>). Keep moist and let stand in a safe place outdoors 7-14 days and then dispose of regulated waste.

<b>European waste catalogue</b>	
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |                                       |                  |
|---------------------------------------|------------------|
| · <b>14.1 UN-Number</b>               |                  |
| · <b>ADR, IMDG</b>                    | Void             |
| · <b>IATA</b>                         | UN1139           |
| · <b>14.2 UN proper shipping name</b> |                  |
| · <b>ADR, IMDG</b>                    | Void             |
| · <b>IATA</b>                         | COATING SOLUTION |

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· **14.3 Transport hazard class(es)**· **ADR, ADN, IMDG**· **Class** Void· **IATA**· **Class** 3 Flammable liquids.· **Label** 3· **14.4 Packing group**· **ADR, IMDG** Void· **IATA** III· **14.5 Environmental hazards:** Not applicable.· **14.6 Special precautions for user** Not applicable.· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.· **Transport/Additional information:** Not hazardous according to ADR.· **UN "Model Regulation":** Void

### SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Directive 2012/18/EU**· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5.000 t· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t· **REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction:** 3· **National regulations:**· **Technical instructions (air):**

Class	Share in %
I	0,8
NK	0,5

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.· **Other regulations, limitations and prohibitive regulations**· **Substances of very high concern (SVHC) according to REACH, Article 57**

25550-51-0 | hexahydromethylphthalic anhydride

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

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H311 Toxic in contact with skin.

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*H315 Causes skin irritation.**H317 May cause an allergic skin reaction.**H318 Causes serious eye damage.**H319 Causes serious eye irritation.**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.**H336 May cause drowsiness or dizziness.**H411 Toxic to aquatic life with long lasting effects.***Abbreviations and acronyms:***ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**LATA: 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)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**SVHC: Substances of Very High Concern**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 3: Flammable liquids – Category 3**Acute Tox. 4: Acute toxicity - oral – Category 4**Acute Tox. 3: Acute toxicity - inhalation – Category 3**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**Asp. Tox. 1: Aspiration hazard – Category 1**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*