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For further information please either give us a call or visit the manufacturer's website.

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All information is correct at the time of download from the manufacturer.

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Registered in England under Company No: 03746590 VAT No: 765 9995 45

WAKOL PU 225 Parquet Adhesive

Technical Information

Area of application

2-component reaction adhesive according to DIN EN ISO 17178 for the shear-resistant laying of

- 10 mm solid wood lamparquet flooring according to DIN EN 13227
- Mosaic parquet according to DIN EN 13488
- On-edge lamella parquet according to DIN EN 14761
- Strip parquet according to DIN EN 13226
- Multi-layer parquet according to DIN EN 13489
- Solid wood planks according to DIN EN 13226 and DIN EN 13990
- Wood-block RE/WE according to DIN 68702
- Laminate flooring approved by the manufacturer for full-area bonding on properly prepared absorbent and non-absorbent subfloors indoors.

Special properties



- solvent-free as defined by TRGS 610
- complies with DIN EN ISO 17178
- water-free – no wood swelling

- 1) Based on the criteria of GEV (Association for Emission-controlled Laying Materials), classified as EMICODE EC1 PLUS: very low in emissions
- 2) Emissions class according to French law
- 3) Solvent-free polyurethane laying materials
- 4) Emissions-certified construction product i.a.w. DIBt principles: Wakol GmbH, 66954 Pirmasens
- 5) Marine equipment product acc. to directive 2014/90/EU Notified Body 0736 Module B and D. Declaration of Conformity available online at www.wakol.de
- 6) Connected Systems guarantee in the system with approved LOBADUR varnishes and LOBASOL oils from Loba. See <https://www.loba.de/en/products/connected-systems/>
- 7) Suitable for underfloor heating
- 8) Suitable for exposure to castor wheels

Technical data

Raw material base:	Polyurethane
Mixing ratio:	8 parts by weight, component A, + 1 parts by weight, component B
Airing time:	none
Open time:	approx. 50 minutes
Pot life:	approx. 35-40 minutes
Setting time:	approx. 24-48 hours
Surface treatment:	after at least 24 hours
Cleaning agent:	WAKOL RT 5960 Cleaning Cloths before adhesive sets
Storage time:	12 months at room temperature
Storage temperature:	not below +5 °C, sensitive to frost

Application and consumption⁹⁾

TKB B3	800-1000 g/m ²	Mosaic parquet Small-formatted ready-to-lay parquet
TKB B5	700-900 g/m ²	Large-formatted ready-to-lay parquet Laminate
TKB B11	1000-1200 g/m ²	Lamparquet On-edge lamella parquet Strip parquet Small-formatted ready-to-lay parquet Wood block
TKB B13	1100-1300 g/m ²	Large-sized strip parquet Large-formatted ready-to-lay parquet Solid wood planks
TKB B15	1400-1500 g/m ²	Large-sized multi-layer parquet Solid wood planks

9) Consumption is dependent on surface structure and absorbability of subfloor.

Subfloors

The subfloor as well as the room climate conditions must meet the requirements of the applicable standards and data sheets. Subfloors must be permanently dry, solid, level, free from cracks, dirt and adhesion-inhibiting substances. Mechanically pre-treat and thoroughly vacuum-clean calcium sulphate screeds according to the manufacturer's specifications or according to the applicable standards and data sheets.

We recommend priming concrete subfloors with integrated floor heating. Allow drying time of the primer.

Usage

Let the contents of the hardener container completely flow into the resin container and intensively mix both components with a suitable stirring implement for at least 3 minutes until a uniform colour is attained and no more streaks can be seen.

Apply the adhesive uniformly with a notched trowel, without letting the adhesive pool. Fit the parquet flooring immediately and press it down firmly. Ensure that the underside of each wooden element is sufficiently coated with adhesive.

The laid areas should not be walked on during the first 4 - 6 hours.

The parquet can be sanded and sealed once it has set completely – after 24 hours, under standardised climatic conditions

Clean the tools using the WAKOL RT 5960 Cleaning Cloth immediately after use. After it has set completely, the adhesive can only be removed by machine.

Important

Processing not below floor temperature of +15 °C and room temperature of +18 °C, as well as room humidity preferably between 40 % and 65 %, maximum 75 %. All information is based on approx. 20 °C and 50 % relative air humidity.

In cold weather, warm up all laying materials in a heated room before use.

Solid wood lamparquet flooring must not exceed a thickness/width ratio of 1:5.

Completely remove spots on sealed surfaces with WAKOL RT 5960 Cleaning Cloths before the adhesive sets. Dried adhesive residue can be only removed by machine.

Parquet flooring made of smoked oak must not emit an odour of ammonia before laying.

For ship construction the usage is limited to a maximum application amount of 720 g/m².

We guarantee the uniform high quality of our products. All data is based on tests and many years of practical experience and refers to standardised conditions. The variety of materials used and the different construction site conditions, which lie beyond our control, preclude any claims based on this data. We therefore recommend making sufficient trials. Accompanying flooring manufacturer's instructions and the currently applicable codes must be observed. We gladly provide technical advice.

The product data sheets can be found in their latest version at www.wakol.com.

This Technical Information of 29.12.2020 supersedes all previous versions.

Material safety data sheet
according to 1907/2006/EC, Article 31

Printing date 03.03.2017

Version number 5

Revision: 03.03.2017

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

- **1.1 Product identifier**
- **Trade name:** WAKOL PU 225 Parquet Adhesive A
- **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** Adhesives
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
WAKOL GmbH
Bottenbacher Str. 30
D-66954 Pirmasens
info@wakol.com
+49 6331 8001 0
- **Informing department:**
Product safety department.
msds@wakol.de
- **1.4 Emergency telephone number:**
Emergency CONTACT (24-Hour-Number):
GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **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:** Adhesive
- **Dangerous components:** Void
- **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**
- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Clean with water and soap. If possible, also wash with polyethylene glycol 400.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **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**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
- **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** Ensure adequate ventilation
- **6.2 Environmental precautions:** No special measures required.
- **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.
- **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** No special measures required.
- **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.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not necessary if room is well-ventilated.

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Trade name: WAKOL PU 225 Parquet Adhesive A

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· **Protection of hands:**



Protective gloves

Preventive skin protection by use of skin-protecting agents is recommended.

· **Material of gloves**

Rubber 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.

· **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:**



Safety glasses

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Pasty
Colour: Light beige
Smell: Weak, characteristic
Odour threshold: Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: 421 °C

· **Flash point:** 255 °C

· **Inflammability (solid, gaseous)** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Self-inflammability:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Critical values for explosion:**

Lower: Not determined.
Upper: Not determined.

· **Steam pressure at 20 °C:** 1 hPa

· **Density at 20 °C** 1.75 g/cm³ (EN ISO 2811-1)

· **Relative density** Not determined.

· **Vapour density** Not determined.

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- **Evaporation rate** *Not determined.*
- **Solubility in / Miscibility with Water:** *Not miscible or difficult to mix.*
- **Partition coefficient: n-octanol/water:** *Not determined.*
- **Viscosity:**
 - dynamic at 20 °C:* 180.000 mPas (ISO 2555)
 - kinematic:* *Not determined.*
- **Solvent content:**
 - Organic solvents:* 0.0 %
 - Water:* 0.0 %
 - VOC* 0.0 %
 - 0.00 %
- **9.2 Other information** *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.*
- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- **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 toxicological effects**
- **Acute toxicity** *Based on available data, the classification criteria are not met.*
- **LD/LC50 values that are relevant for classification:**

471-34-1 calcium carbonate
Oral LD50 >5000 mg/kg (rat)
- **Primary irritant effect:**
- **Skin corrosion/irritation** *Based on available data, the classification criteria are not met.*
- **Serious eye damage/irritation** *Based on available data, the classification criteria are not met.*
- **Respiratory or skin sensitisation** *Based on available data, the classification criteria are not met.*
- **CMR effects (carcinogenity, 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.*
- **STOT-single exposure** *Based on available data, the classification criteria are not met.*
- **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** *No further relevant information available.*
- **12.3 Bioaccumulative potential** *No further relevant information available.*
- **12.4 Mobility in soil** *No further relevant information available.*

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- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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** Smaller quantities can be disposed of with household waste.
- **European waste catalogue**
08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 04 00 wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, 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:**
- **Marine pollutant:** No
- **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 dangerous according to the above specifications.
- **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**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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- **National regulations**
- **VOC:**
- **VOC (EU) 0,0 g/l**
- **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.

· **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*
- 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)*
- VOC: Volatile Organic Compounds (USA, EU)*
- MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)*
- LC50: Lethal concentration, 50 percent*
- LD50: Lethal dose, 50 percent*
- PBT: Persistent, Bioaccumulative and Toxic*
- vPvB: very Persistent and very Bioaccumulative*

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

- **1.1 Product identifier**
- **Trade name:** WAKOL PU 225 Parquet Adhesive B
- **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:**
WAKOL GmbH
Bottenbacher Str. 30
D-66954 Pirmasens
info@wakol.com
+49 6331 8001 0
- **Informing department:**
Product safety department.
msds@wakol.de
- **1.4 Emergency telephone number:**
Emergency CONTACT (24-Hour-Number):
GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

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



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 2 H351 Suspected of causing cancer.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.
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.

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



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**
diphenylmethanediisocyanate, isomeres and homologues

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Trade name: WAKOL PU 225 Parquet Adhesive B

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· **Hazard statements**

- H332 Harmful if inhaled.
- 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.
- H351 Suspected of causing cancer.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P284 [In case of inadequate ventilation] wear respiratory protection.
- P280 Wear protective gloves/protective clothing/eye protection/face 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.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 Call a POISON CENTER/doctor if you feel unwell.

· **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:** Adhesive

· **Dangerous components:**

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	50-100%
EC number: 618-498-9	⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	

· **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**

· **General information**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation** Supply fresh air; consult doctor in case of complaints.

· **After skin contact** Clean with water and soap. If possible, also wash with polyethylene glycol 400.

· **After eye contact**

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

· **After swallowing** Do not induce vomiting; call for medical help immediately.

· **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**

No further relevant information available.

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Revision: 22.03.2017

Trade name: WAKOL PU 225 Parquet Adhesive B

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
Hydrogen cyanide (HCN)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** 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.
- **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**
Prevent formation of aerosols.
Ensure good ventilation/exhaustion at the workplace.
- **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:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

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Trade name: WAKOL PU 225 Parquet Adhesive B

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- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures are to be adhered to when handling chemicals.
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.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Recommended filter device for short term use:** Combination filter A-P2
- **Protection of hands:**



Protective gloves

Preventive skin protection by use of skin-protecting agents is recommended.

- **Material of gloves**
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.7 mm
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.
- **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:**

Form:	Fluid
Colour:	Brown
- **Smell:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**

Melting point/freezing point:	10 °C
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- Initial boiling point and boiling range:** Undetermined.
- **Flash point:** >200 °C
- **Inflammability (solid, gaseous)** Not applicable.
- **Ignition temperature:** >600 °C
- **Decomposition temperature:** Not determined.
- **Self-inflammability:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Critical values for explosion:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Steam pressure at 20 °C:** <0.00001 hPa
- **Density at 20 °C** 1.23 g/cm³ (EN ISO 2811-1)
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with**
 - Water:** Not miscible or difficult to mix.
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
 - dynamic at 20 °C:** 90 mPas (ISO 2555)
 - kinematic:** Not determined.
- **Solvent content:**
 - Organic solvents:** 0.0 %
 - Water:** 0.0 %
 - VOC** 0.0 %
 - 0.00 %
- **9.2 Other information** 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.
- **10.3 Possibility of hazardous reactions** Reacts with alcohols, amines, aqueous acids and alkalis.
- **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 toxicological effects**
- **Acute toxicity**
Harmful if inhaled.
- **LD/LC50 values that are relevant for classification:**
9016-87-9 diphenylmethanediisocyanate, isomeres and homologues
Oral LD50 >10000 mg/kg (rat)

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Dermal LD50 >9400 mg/kg (rabbit)

Inhalative LC50/4h 11 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **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**
Suspected of causing cancer.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause respiratory irritation.
- **STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
 - **Aquatic toxicity:**
-
- 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**
- LC50/96h >1.000 mg/l (Danio rerio)
LC0/96h >1000 mg/l (Brachydanio rerio)
EC50/24h >100 mg/l (bacteriums)
EC50/48h >1.000 mg/l (Daphnia magna)
 - **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.
 - **Additional ecological information:**
 - **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 - **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 be specially treated adhering to official regulations.

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· **European waste catalogue**

08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS

08 05 00 wastes not otherwise specified in 08

08 05 01* waste isocyanates

· **Uncleaned packagings:**

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

SECTION 14: Transport information

· **14.1 UN-Number**

· ADR, ADN, IMDG, IATA Void

· **14.2 UN proper shipping name**

· ADR, ADN, 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.

· **Marine pollutant:**

-

· **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 dangerous according to the above specifications.

· **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**

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

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **National regulations**

· **Other regulations, limitations and prohibitive regulations**

· **GEV-Guideline/EMICODE:**

EC 1 R, "very low emission"

(as ready-for-use mixture with component A)

· **VOC:**

· **VOC (EU)** 0,0 g/l

· **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**

H315 Causes skin irritation.

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H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

· 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

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)

VOC: Volatile Organic Compounds (USA, EU)

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

ENVIRONMENTAL PRODUCT DECLARATION

for **WAKOL PU 225 Parquet Adhesive**
as per ISO 14025 and EN 15804

The general Environmental Product Declaration (EPD) of the German IBU (Institut Bauen und Umwelt e.V) with the declaration number

EPD-DBC-20130027-IBG1-D

for **Reactive resins based on polyurethane or SMP, filled or aqueous, solvent-free**

is applicable for the above mentioned building product and describes its environmental performance to promote sustainable construction.

The product is manufactured and distributed by:

Wakol GmbH
Bottenbacher Straße 30
D-66954 Pirmasens
(herinafter referred to as manufacturer)

This declaration of the "Institut Bauen und Umwelt e.V." is the data basis for presenting technical properties of a product, because it reveals all the relevant environmental data, which are indispensable for calculating the life cycle assessment or the energy consumption of a building.

It contains in detailed manner:

- General indications
- Product definition
- LCA (Life Cycle Assessment): calculation rules
- LCA: Szenarios and further technical information
- LCA: results
- LCA: interpretations
- Verifications

More information to EPDs can be found on the homepage of the "Institut Bauen und Umwelt e.V." – www.bau-umwelt.de.

The technical data sheet and more information to the product can be found on www.wakol.de.

This environmental product declaration is issued under the sole responsibility of the manufacturer.

Signed for and on behalf of the manufacturer by:

Pirmasens, 26.07.2016



Dr. Martin Schäfer
Director Research & Development,
Technical Service and Purchasing