

1 Identification

- **Product identifier**
- **Trade name:** *WAKOL PU 280 Moisture Barrier*
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** *Primer/ Subcoating*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
*Loba-Wakol LLC
521-C Eagleton Downs Dr.
Pineville, NC 28134, USA
+1 704 527 5919*
- **Information department:** *Industrial Safety Department*
- **Emergency telephone number:**
*24-hour-Emergency- Telephone-Number (GBK Contract ID: 98229): (001) 352 323 3500
24-hour-Emergency- Telephone-Number (GBK Contract ID: 98229): (001) 352 323 3500*

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

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

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. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07



GHS08

- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

diphenylmethanediisocyanate, isomeres and homologues

- **Hazard statements**

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

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

May cause an allergic skin reaction.

May cause respiratory irritation.

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May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Do not breathe mist/vapours/spray.

Wear protective gloves / eye protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If experiencing respiratory symptoms: Call a poison center/doctor.

If skin irritation occurs: Get medical advice/attention.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Adhesive

· **Dangerous components:**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues

50-100%

4 First-aid measures

· **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 and to be sure call for a doctor.

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

· **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.

· **After swallowing:** If symptoms persist consult doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **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.
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from frost.
Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit 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.

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- **Additional information:** The lists that were valid during the creation were used as basis.
- **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.
- **Breathing equipment:**
Not necessary if room is well-ventilated.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:** Protective gloves
- **Material of gloves:** Butyl rubber, BR
- **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

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form:** Fluid
 - Color:** Blue
 - Odor:** Characteristic
- **Change in condition**
 - Melting point/Melting range:** <0 °C (<32 °F)
 - Boiling point/Boiling range:** 351 °C (664 °F)
- **Flash point:** 210 °C (410 °F)
- **Ignition temperature:** >600 °C (>1112 °F)
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapor pressure at 20 °C (68 °F):** <0.00001 hPa (<0 mm Hg)
- **Density at 20 °C (68 °F):** 1.17 g/cm³ (9.764 lbs/gal) (EN ISO 2811-1)
- **Solubility in / Miscibility with**
 - Water:** Hydrolized.
- **Viscosity:**
 - Dynamic at 20 °C (68 °F):** 300 mPas (ISO 2555)
- **Solvent content:**
 - VOC content:** 0.00 %

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· **Other information**

No further relevant information available.

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10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Reacts with alcohols, amines, aqueous acids and alkalis.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
Danger of toxic pyrolysis products.
Carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues
 Oral LD50 >10000 mg/kg (rat) (OECD RL 401)
 Dermal LD50 >9400 mg/kg (rabbit) (OECD RL 402)
 Inhalative LC50/4h 11 mg/l (rat) (OECD RL 403)
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:**
Sensitizing effect through inhalation is possible with prolonged exposure.
Sensitizing effect by skin contact is possible with prolonged exposure.
Sensitization possible through inhalation.
Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**

 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues: 3
- **NTP (National Toxicology Program)**

 None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**

 None of the ingredients is listed.

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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**
- **9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**
- *EC50/24h >100 mg/l (bacteriums)*
- *EC50/3h >100 mg/l (sludge) (OECD 209)*
- *EC50/48h >1.000 mg/l (Daphnia magna)*
- *LC0/96h >1000 mg/l (Brachydanio rerio)*
- *LC50/96h >1000 mg/l (Danio rerio)*
- **Persistence and degradability** *No further relevant information available.*
- **Behavior in environmental systems:**
- **Bioaccumulative potential** *No further relevant information available.*
- **Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:**
- *Water hazard class 1 (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.*
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **Other adverse effects** *No further relevant information available.*

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- *Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- *Must be specially treated adhering to official regulations.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA** *Void*
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA** *Void*
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class** *Void*
- **Packing group**
- **DOT, ADR, IMDG, IATA** *Void*
- **Environmental hazards:**
- **Marine pollutant:** *No*
- **Special precautions for user** *Not applicable.*
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** *Not applicable.*

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- **Transport/Additional information:** Not dangerous according to the above specifications.
- **DOT**
- **Remarks:** not regulated

- **ADR**
- **Remarks:** not regulated

- **IMDG**
- **Remarks:** not regulated

- **IATA**
- **Remarks:** not regulated
- **UN "Model Regulation":** -

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):**
9016-87-9 diphenylmethanediisocyanate, isomeres and homologues
- **Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.
- **TSCA (Toxic Substances Control Act):**
9016-87-9 diphenylmethanediisocyanate, isomeres and homologues
- **Proposition 65**
- **Chemicals known to cause cancer:**
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.
- **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
diphenylmethanediisocyanate, isomeres and homologues
- **Hazard statements**
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.

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· **Precautionary statements**

Do not breathe mist/vapours/spray.

Wear protective gloves / eye protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If experiencing respiratory symptoms: Call a poison center/doctor.

If skin irritation occurs: Get medical advice/attention.

· **National regulations:**

· **VOC:**

· **VOC (USA):** 0,0 g/l / 0,0 lb/gl

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

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.

· **Department issuing SDS:** Industrial Safety Department.

· **Contact:** Dr. Thomas Wieland

· **Date of preparation / last revision** 06/26/2015 / -

· **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

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2