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

## 1.1. Product identifier

Article No. (manufacturer/supplier) PW40000AFJ10
Trade name/designation AquaSeal Härter
abZ-Nr. Z-157.10-47

UFI: M0Y8-10QT-P00A-R32V

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

#### Relevant identified uses

paint and/or paint related material

## Uses advised against

Do not use for injecting or spraying. Product is not intended for consumer use.

## 1.3. Details of the supplier of the safety data sheet

# supplier (manufacturer/importer/downstream user/distributor)

Berger-Seidle GmbH

Parkettlacke - Klebstoffe - Bauchemie Telephone: +49 6359 / 8005-0 Maybachstraße 2 Telefax: +49 6359 / 8005-170

67269 Grünstadt

Germany

## Department responsible for information:

Laboratory

E-mail Sicherheitsdaten@berger-seidle.de

### 1.4. Emergency telephone number

24-hour emergency number in side USA: +1 872 5888271 or +11 49 700 24112112 (BLG)

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Flam. Liq. 4 / H227 Flammable liquids Combustible liquid.

Eye Irrit. 2 / H319 Serious eye damage/eye irritation Causes serious eye irritation.

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction.

STOT SE 3 / H335 STOT-single exposure May cause respiratory irritation.

# 2.2. Label elements

# GHS-US labeling

### **Hazard pictograms**



#### Warning

# **Hazard statements**

H227 Combustible liquid.

H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.

## **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing vapours.

P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves and eye/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

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P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Keep locked up.

P501 Dispose of contents/container to industrial incineration plant.

#### Hazard components for labelling

#### 2.3. Other hazards

No information available.

#### Other information

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

# **SECTION 3: Composition/information on ingredients**

3.2. Mixtures

**Description** Preparations containing isocyanates

**Hazardous ingredients** 

**GHS-US** classification

CAS No.	Designation // Remark	weight-%
28182-81-2	Hexamethylene diisocyanate, oligomers	50 - 100
9046-01-9	2-(tricylcoxy) ethyl dihydrogen phosphate	1 - 2,5
822-06-0	hexamethylene-di-isocyanate	< 0,1

## **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

# In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

# Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

# After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

# Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

First Aid, decontamination, treatment of symptoms.

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

Suitable extinguishing media

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alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

#### Unsuitable extinguishing media

strong water jet

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

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

# 5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

#### 6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

## 6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

#### **Further information**

Vapours are heavier than air. Vapours form explosive mixtures with air.

# 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRGS 727)".

#### Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

# Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 25 °C. Protect from heat and direct sunlight.

Due to the content of organic solvents in the preparation:

Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

# 7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

# Occupational exposure limit values

hexamethylene-di-isocyanate

\*

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Index No. 615-011-00-1 / EC No. 212-485-8 / CAS No. 822-06-0

ACGIH, TWA: 0,034 mg/m3; 0,005 ppm NIOSH, TWA: 0,035 mg/m3; 0,005 ppm NIOSH, C: 0,14 mg/m3; 0,02 ppm ACGIH-BEI, TWA: 15 µg/g creatinine

Remark: 1,6-Hexamethylene diamine, Following hydrolysis:; urine; end of exposure or end of shift

#### Additional information

TWA: Long-term occupational exposure limit value STEL: short-term occupational exposure limit value

C : peak limitation

## 8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

#### Personal protection equipment

## Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

#### Hand protection

For prolonged or repeated handling the following glove material must be used: Butyl caoutchouc (butyl rubber)

Thickness of the glove material > 0,4 mm; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

#### Eye/face protection

Wear closely fitting protective glasses in case of splashes.

# **Body protection**

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

# Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

#### **Environmental exposure controls**

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: Liquid colour: colourless

Odour: characteristic

Odour threshold: not applicable

Initial boiling point and boiling range: 175 °C

Source: Dipropylene glycol dimethyl ether, mixture of isomers

Lower and upper explosion limit:

Lower explosion limit: not determined Upper explosion limit: not determined

Flash point: 65 °C
Auto-ignition temperature: 165 °C

Source: Dipropylene glycol dimethyl ether, mixture of isomers

Decomposition temperature: not applicable

pH at 20 °C: not applicable Cinematic viscosity (40°C): < 80 mm²/s

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Viscosity at 20 °C:

13 s 4 mm

Solubility(ies):

Water solubility at 20 °C: partially soluble Partition coefficient: n-octanol/water: see section 12 Vapour pressure at 20 °C: 0.72 mbar

Method: calculated.

1,02 g/cm<sup>3</sup>

Method: DIN 53211

Source: Dipropylene glycol dimethyl ether, mixture of isomers

Density and/or relative density:

Density at 20 °C:

Method: ISO 2811, part 3

Relative vapour density: not applicable particle characteristics: not applicable

9.2. Other information

> Solvent separation test: < 3 weight-% (ADR/RID)

## SECTION 10: Stability and reactivity

# 10.1. Reactivity

No information available.

#### 10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7

#### 10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

#### 10.5. Incompatible materials

not applicable

#### 10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

# **SECTION 11: Toxicological information**

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

# **Acute toxicity**

Hexamethylene diisocyanate, oligomers oral, LD50, Rat: > 5000 mg/kg

Method: OECD 401

dermal, LD50, Rabbit: > 2000 mg/kg

hexamethylene-di-isocyanate oral, LD50, Rat: 959 mg/kg

Method: OECD 401 dermal, LD50, Rat: > 7000 mg/kg

inhalative (vapours), LC50, Rat (4 h)

## Skin corrosion/irritation; Serious eye damage/eye irritation

Causes serious eye irritation.

hexamethylene-di-isocyanate

Skin (4 h) eyes

2-(tricylcoxy) ethyl dihydrogen phosphate

Skin (4 h)

eyes

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# Respiratory or skin sensitisation

May cause an allergic skin reaction.

hexamethylene-di-isocyanate

Skin:

Respiratory system:

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

### STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

hexamethylene-di-isocyanate

Specific target organ toxicity (single exposure), Irritation

#### **Aspiration hazard**

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

## Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

#### Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

#### Remark

There is no information available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers. See chapters 2 and 15 for details.

#### 11.2. Information on other hazards

# **Endocrine disrupting properties**

No information available.

# SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

Do not allow to enter into surface water or drains.

# 12.1. Toxicity

hexamethylene-di-isocyanate

Daphnia toxicity, EC0, Daphnia magna (Big water flea): > 89 mg/L (48 h)

Method: European Union

Bacteria toxicity, EC50: 842 mg/L (3 h)

Algae, Desmodesmus subspicatus: > 77,4 (72 h) Fish toxicity, LC0:, Danio rerio (zebrafish): > 82,7 mg/L

Algae, NOEC, Desmodesmus subspicatus: 11,7 mg/L (72 h)

# Long-term Ecotoxicity

2-(tricylcoxy) ethyl dihydrogen phosphate

Fish toxicity, LC50 (96 h)

# 12.2. Persistence and degradability

hexamethylene-di-isocyanate

, DT50: 48,44 h Method: Photolysis BOD28: 42 % Method: OECD F

### 12.3. Bioaccumulative potential

Toxicological data are not available.

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# **Bioconcentration factor (BCF)**

Toxicological data are not available.

# 12.4. Mobility in soil

Toxicological data are not available.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6. Endocrine disrupting properties

No information available.

#### 12.7. Other adverse effects

No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

## Appropriate disposal / Product

#### Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

#### List of proposed waste codes/waste designations in accordance with EWC

080111\*

Waste paint and varnish containing organic solvents or other dangerous substances

\*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

#### Appropriate disposal / Package

#### Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

# **SECTION 14: Transport information**

No dangerous good in sense of this transport regulation.

## 14.1. UN number or ID number

not applicable

14.2. UN proper shipping name

14.3. Transport hazard class(es)

not applicable

14.4. Packing group

not applicable

14.5. Environmental hazards

Land transport (ADR/RID) not applicable
Marine pollutant not applicable

# 14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

#### **Further information**

#### Land transport (ADR/RID)

Tunnel restriction code

Sea transport (IMDG)

EmS-No. not applicable

# 14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

## **SECTION 15: Regulatory information**

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

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Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

This product is not classified according to Directive 2012/18/EU.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC-value (in g/L) ISO 11890-2: 442 VOC-value (in g/L) ASTM D2369: 442

**National regulations** 

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Substance/product listed in the following inventories:

TSCA: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information** 

Full text of classification in section 3:

Acute Tox. 4 / H332 Acute toxicity (inhalative) Harmful if inhaled.

Skin Sens. 1 / H317 Respiratory or skin sensitisation May cause an allergic skin reaction. STOT SE 3 / H335 STOT-single exposure May cause respiratory irritation.

Skin Irrit. 2 / H315 Skin corrosion/irritation Causes skin irritation.

Eye Dam. 1 / H318 Serious eye damage/eye irritation Causes serious eye damage.

Aquatic Chronic 3 / H412 Hazardous to the aquatic environment Harmful to aquatic life with long lasting effects.

Acute Tox. 4 / H302 Acute toxicity (oral) Harmful if swallowed. Acute Tox. 2 / H330 Acute toxicity (inhalative) Fatal if inhaled.

Eye Irrit. 2 / H319 Serious eye damage/eye irritation Causes serious eye irritation.

Resp. Sens. 1 / H334 Respiratory or skin sensitisation May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 4 Flammable liquids On basis of test data.

Eye Irrit. 2 Serious eye damage/eye irritation Calculation method.

Skin Sens. 1 Respiratory or skin sensitisation Calculation method.

STOT SE 3 STOT-single exposure Calculation method.

Abbreviations and acronyms

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL Occupational Exposure Limit Value

BLV Biological Limit Value
CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging CMR Carcinogenic, Mutagenic and Reprotoxic

DIN German Institute for Standardization / German industrial standard

DNEL Derived No-Effect Level

EAKV European Waste Catalogue Directive

EC Effective Concentration
EC European Community
EN European Standard

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 ICAO-TI International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous

Goods by Air

IMDG Code International Maritime Code for Dangerous Goods ISO International Organization for Standardization

LC Lethal Concentration

LD Lethal Dose

MARPOL Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD Organisation for Economic Cooperation and Development

PBT persistent, bioaccumulative, toxic PNEC Predicted No Effect Concentration

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REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Regulations concerning the International Carriage of Dangerous Goods by Rail

UN United Nations

VOC Volatile Organic Compounds

vPvB very persistent and very bioaccumulative

#### **Further information**

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1.It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

<sup>\*</sup> Data changed compared with the previous version