PA1005 POLYASPARTIC POLYUREA-B

Safety Data Sheet
according to Regulation (EU) 2015/830


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

1.1. Product identifier

Product form: Mixture
Trade name: PA1005 POLYASPARTIC POLYUREA-B
Product code: PA1005
Type of product: Coating
Product group: Trade product

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

1.2.1. Relevant identified uses

Intended for general public

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

AKKİM YAPI KİMYASALLARI SANAYİ ve TİCARET A.Ş.
Yeşilbayır mahallesi Şimşir sokak No:22
34555 İSTANBUL - TURKEY
T +90 2127711371 - F +90 2127713888
info@akfixcoating.com, info@akfix.com - www.akfixcoating.com, www.akfix.com

1.4. Emergency telephone number

Emergency number: +90 2127711371 (9:00 am - 17:00 pm GMT+2)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (inhalation/vapour) Category 4 H332 Calculation method
Sensitisation — Skin, Category 1 H317 Calculation method
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation H335 Calculation method

Full text of hazard classes and H-statements: see section 16

2.2. Label elements

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

Hazard pictograms (CLP): ☐

Signal word (CLP): Warning

Hazardous ingredients: hexamethylenediisocyanate; Hexane, 1,6-diisocyanato-, homopolymer

Hazard statements (CLP): H317 - May cause an allergic skin reaction
H332 - Harmful if inhaled
H335 - May cause respiratory irritation

Precautionary statements (CLP): P261 - Avoid breathing fume, gas, mist, vapours
PA1005 POLYASPATIC POLYUREA-B
Safety Data Sheet
according to Regulation (EU) 2015/830
Date of issue: 5/8/2015
Revision date: 1/4/2016
Supersedes: 5/8/2015 Version: 1.0

2.2. Other hazards
No additional information available

 SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexane, 1,6-diisocyanato-, homopolymer</td>
<td>(CAS No) 28182-81-2 (REACH no) 01-2119485796-17</td>
<td>100</td>
<td>Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 STOT SE 3, H335</td>
</tr>
<tr>
<td>hexamethylene-di-isocyanate (Note 2)</td>
<td>(CAS No) 822-06-0 (EC no) 212-485-8 (EC index no) 615-011-00-1 (REACH no) 01-2119457571-37</td>
<td>&lt;= 0.25</td>
<td>Acute Tox. 3 (Inhalation), H331 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>hexamethylene-di-isocyanate</td>
<td>(CAS No) 822-06-0 (EC no) 212-485-8 (EC index no) 615-011-00-1 (REACH no) 01-2119457571-37</td>
<td>(C &gt;= 0.5) Resp. Sens. 1, H334 (C &gt;= 0.5) Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>

Note 2: The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

Full text of H-statements: see section 16

 SECTION 4: First aid measures

4.1. Description of first aid measures

| First-aid measures general | : Call a poison center or a doctor if you feel unwell. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. |
| First-aid measures after ingestion | : Call a poison center or a doctor if you feel unwell. |

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

Symptoms/injuries after inhalation | : May cause respiratory irritation. |
Symptoms/injuries after skin contact | : May cause an allergic skin reaction. |

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

Treat symptomatically.

 SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3. Advice for firefighters
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Country</th>
<th>Local name</th>
<th>MAK (mg/m³)</th>
<th>MAK (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Local name</td>
<td>0.035 mg/m³</td>
<td>0.005 ppm</td>
</tr>
<tr>
<td>Belgium</td>
<td>Local name</td>
<td>0.034 mg/m³</td>
<td>0.005 ppm</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Local name</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Local name</td>
<td>0.035 mg/m³</td>
<td>0.00508 ppm</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Exp. limit (PEL) (mg/m³)</td>
<td>0.07 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Exp. limit (PEL) (ppm)</td>
<td>0.0102 ppm</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Remark <em>(CZ)</em></td>
<td>Local name</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
<td>-------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>S</td>
<td>Hexamethylendisocyanat</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td>Hexamethylene diisocyanate (mg/m³) 0.035 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td></td>
<td>Heksametüleen-diisotsüanaat (1,6-disotsüanato-heksaan)</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>OEL TWA (mg/m³)</td>
<td>0.03 mg/m³</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td></td>
<td>Dipropylen-diisocyanate d'hexaméthylène (3)</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>VME (mg/m³)</td>
<td>0.075 mg/m³</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>VLE (mg/m³)</td>
<td>0.15 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td>Hexamethylen-1,6-diisocyanat</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (mg/m³)</td>
<td>0.035 mg/m³</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>VLE (ppm)</td>
<td>0.02 ppm</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>AK-érték</td>
<td>0.035 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL (8 hours ref) (ppm)</td>
<td>0.005 ppm</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td></td>
<td>Heksametilendiizocianats (1,6-heksandiizocianats)</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>IPRV (mg/m³)</td>
<td>0.03 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td></td>
<td>Disiocianato de hexametileno</td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>OEL TWA (ppm)</td>
<td>0.005 ppm</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>OEL TWA (mg/m³)</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>OEL TWA (ppm)</td>
<td>0.007 ppm</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>OEL STEL (mg/m³)</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>OEL STEL (ppm)</td>
<td>0.14 ppm</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td></td>
<td>heksametilen-1,6-dizocianat</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td></td>
<td>Disiocianato de 1,6-hexametileno (HDI)</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (mg/m³)</td>
<td>0.035 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (ppm)</td>
<td>0.005 ppm</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td>Hexamethylen diisocyanate</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>nivågränsvärde (NVG) (mg/m³)</td>
<td>0.02 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>nivågränsvärde (NVG) (ppm)</td>
<td>0.002 ppm</td>
<td></td>
</tr>
</tbody>
</table>
# PA1005 POLYASPARTIC POLYUREA-B Safety Data Sheet

## According to Regulation (EU) 2015/830

**Date of issue:** 5/8/2015  
**Revision date:** 1/4/2016  
**Supersedes:** 5/8/2015  
**Version:** 1.0

### Exposure controls

<table>
<thead>
<tr>
<th>Location</th>
<th>Local Name</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>takgränsvärde (TGV) (mg/m³)</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>Grenseverdier (AN) (mg/m³)</td>
<td>0.035</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>TWA (mg/m³)</td>
<td>0.02</td>
<td>0.07</td>
</tr>
<tr>
<td>USA - ACGIH</td>
<td>ACGIH TWA (ppm)</td>
<td>0.005</td>
<td></td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Hand protection: Protective gloves

Eye protection: Safety glasses

Skin and body protection: Wear suitable protective clothing

Respiratory protection: Wear respiratory protection

Environmental exposure controls: Avoid release to the environment.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless liquid.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless. light yellow.</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 150 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 160 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure at 50 °C</td>
<td>13 hPa</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.15 - 1.17 g/cm³</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>720 - 750 mPa.s</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Inhalation: vapour: Harmful if inhaled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE CLP (vapours)</td>
<td>10.900 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitisation: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): May cause respiratory irritation.
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects
No additional information available
SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste treatment methods: Dispose of contents/container in accordance with licensed collector’s sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name
Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)
ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group
Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user
- Overland transport
Not applicable
- Transport by sea
Not applicable
Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

EU-Regulations
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

National regulations

Germany
VwVwS Annex reference: Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands
SZW-lijst van kankerverwekkende stoffen: None of the components are listed
SZW-lijst van mutagene stoffen: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling: None of the components are listed

Denmark
Recommendations Danish Regulation: Young people below the age of 18 years are not allowed to use the product

Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 3 (Inhalation) Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Inhalation) Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour) Acute toxicity (inhalation:vapour) Category 4
Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
Resp. Sens. 1 Sensitisation — Respiratory, Category 1
Skin Irrit. 2 Skin corrosion/irritation, Category 2
Skin Sens. 1 Sensitisation — Skin, Category 1
STOT SE 3 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315 Causes skin irritation
H317 May cause an allergic skin reaction
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
PA1005 POLYASPARTIC POLYUREA-B
Safety Data Sheet

according to Regulation (EU) 2015/830


SDS EU AKFIXCOATING

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.