

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## 2060 TUNSEAL Scheibenkleber 400 ml Folienbeutel K12060040AB

Revision date: 09.10.2018

Product code: 1400437

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

#### 1.1. Product identifier

2060 TUNSEAL Scheibenkleber 400 ml Folienbeutel K12060040AB

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

##### Use of the substance/mixture

Adhesives, sealants

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

|               |                            |                                 |
|---------------|----------------------------|---------------------------------|
| Company name: | TUNAP GmbH & Co. KG        |                                 |
| Street:       | Bürgermeister-Seidl-Str. 2 |                                 |
| Place:        | D-82515 Wolfratshausen     |                                 |
| Telephone:    | +49 (0) 8171/1600 - 0      | Telefax: +49 (0) 8171/1600 - 40 |
| e-mail:       | sdb@tunap.com              |                                 |
| Internet:     | www.tunap.com              |                                 |

**1.4. Emergency telephone number:** +49 (0) 30 30 686 790 (Giftnotruf Berlin)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No. 1272/2008

Hazard categories:

Respiratory or skin sensitisation: Resp. Sens. 1

Hazard Statements:

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

#### 2.2. Label elements

##### Regulation (EC) No. 1272/2008

##### Hazard components for labelling

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

**Signal word:** Danger

##### Pictograms:



##### Hazard statements

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

##### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P284 Wear respiratory protection.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
 P501 Dispose of contents/container to ....

##### Special labelling of certain mixtures

EUH204 Contains isocyanates. May produce an allergic reaction.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

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#### 3.2. Mixtures

##### Hazardous components

| CAS No   | Chemical name  |              |          | Quantity    |
|----------|--|--------------|----------|-------------|
|          | EC No  | Index No     | REACH No |             |
|          | Classification according to Regulation (EC) No. 1272/2008 [CLP]  |              |          |             |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate   |              |          | 0.1 - < 1 % |
|          | 202-966-0  | 615-005-00-9 |          |             |
|          | Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373 |              |          |             |

Full text of H and EUH statements: see section 16.

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

###### General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

###### After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

###### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

###### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

###### After ingestion

Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

###### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

###### Unsuitable extinguishing media

High power water jet.

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

Non-flammable.

##### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

##### Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### SECTION 6: Accidental release measures

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust.

#### **Advice on protection against fire and explosion**

No special fire protection measures are necessary.

#### **Further information on handling**

Avoid contact with skin and eyes.

### **7.2. Conditions for safe storage, including any incompatibilities**

#### **Requirements for storage rooms and vessels**

Keep container tightly closed.

#### **Hints on joint storage**

No special measures are necessary.

#### **Further information on storage conditions**

Store in a cool dry place. Observe legal regulations and provisions.

### **7.3. Specific end use(s)**

Adhesives, sealants

## SECTION 8: Exposure controls/personal protection

### **8.1. Control parameters**

#### **Exposure limits (EH40)**

| CAS No | Substance   | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|--------|---|-----|-------------------|-----------|---------------|--------|
| -      | Isocyanates, all (as -NCO) Except methyl isocyanate | -   | 0.02              |           | TWA (8 h)     | WEL    |
|        |   | -   | 0.07              |           | STEL (15 min) | WEL    |

#### **Additional advice on limit values**

- a no restriction
- b End of exposure or end of shift
- c at long term exposure: after several previous shifts
- d before next shift

blood (B)

Urine (U)

### **8.2. Exposure controls**

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#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

#### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

#### Eye/face protection

Wear eye protection/face protection.

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Skin protection

Wear suitable protective clothing.

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

#### Environmental exposure controls

Observe legal regulations and provisions.

### SECTION 9: Physical and chemical properties

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

|                 |                |
|-----------------|----------------|
| Physical state: | viscous        |
| Colour:         | black          |
| Odour:          | characteristic |

|                      | Test method              |
|----------------------|--------------------------|
| pH-Value (at 20 °C): | not determined DIN 19268 |

#### Changes in the physical state

|  |                 |
|--|-----------------|
| Melting point:                           | not determined  |
| Initial boiling point and boiling range: | 208 °C          |
| Flash point:                             | 164 °C ISO 3679 |

#### Flammability

|                         |                |
|-------------------------|----------------|
| Solid:                  | not determined |
| Gas:                    | not applicable |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |

#### Auto-ignition temperature

|                            |                |
|----------------------------|----------------|
| Solid:                     | not determined |
| Gas:                       | not applicable |
| Decomposition temperature: | not determined |

#### Oxidizing properties

|                     |                                   |
|---------------------|-----------------------------------|
| Not oxidising.      |                                   |
| Vapour pressure:    | not determined                    |
| Density (at 20 °C): | 1,142 g/cm <sup>3</sup> DIN 51757 |

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Water solubility: The study does not need to be conducted because the substance is known to be insoluble in water.

#### Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: DIN 53019-1

Viscosity / kinematic:  
(at 40 °C) DIN EN ISO 3104Flow time:  
(at 20 °C) DIN EN ISO 2431

Vapour density: not determined

Evaporation rate: not determined

#### 9.2. Other information

Solid content: not determined

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

none

#### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

#### Further information

Do not mix with other chemicals.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

There are no data available on the mixture itself.

##### Acute toxicity

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

| CAS No   | Chemical name  |               |          |        |        |
|----------|--|---------------|----------|--------|--------|
|          | Exposure route   | Dose          | Species  | Source | Method |
| 101-68-8 | 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate |               |          |        |        |
|          | oral   | LD50<br>mg/kg | 9200     | Rat    | GESTIS |
|          | inhalation vapour  | ATE           | 11 mg/l  |        |        |
|          | inhalation aerosol   | ATE           | 1,5 mg/l |        |        |

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**Irritation and corrosivity**

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

**Sensitising effects**

May cause sensitisation by inhalation and skin contact. (4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

**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.

**Specific effects in experiment on an animal**

No information available.

**Additional information on tests**

The mixture is classified as hazardous according to Directive 1999/45/EC.

**SECTION 12: Ecological information****12.1. Toxicity**

The product is not: Ecotoxic.

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**12.4. Mobility in soil**

The product has not been tested.

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

The product has not been tested.

**12.6. Other adverse effects**

No information available.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

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#### Waste disposal number of used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

#### Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

### SECTION 15: Regulatory information

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

##### EU regulatory information

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Restrictions on use (REACH, annex XVII):

Entry 56: 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

#### Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 2 - clearly water contaminating

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

#### 15.2. Chemical safety assessment

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

### SECTION 16: Other information

#### 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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

| Classification      | Classification procedure |
|---------------------|--------------------------|
| Resp. Sens. 1; H334 | Calculation method       |

#### Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.  
 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.

#### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*