Revision Date: 20/10/2022

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

1.1. Product identifier

Product name Timbond 5 Min Gel Polyurethane (PU) Adhesive 310ml

Product code AD0511EX

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

Identified uses Adhesive.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

Adkwik Ltd
Unit F Dales Manor Business Park
Grove Road
Sawston
Cambridge
CB22 3TJ
T: +44 (0) 01223 412373
E: technical@adkwik.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 01223 412373 (NOT 24HRS)
Working Hours: Weekdays: 8am- 4.30pm (GMT)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1- H317 Carc. 2 - H351 STOT SE 3 - H335 STOT RE 2 - H373

Environmental hazards Not Classified

Human health Contains non-volatile isocyanate. Heating may generate vapours which irritate the respiratorysystem. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Hazard pictograms

Signal word

Danger

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

EUH204 Contains isocyanates. May produce an allergic reaction.
P260 Do not breathe vapour/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P281 Use personal protective equipment as required.
P284 [In case of inadequate ventilation] wear respiratory 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.
P313 Get medical advice/ attention.
P501 Dispose of contents/ container in accordance with national regulations.
RCH004a Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
RCH004b Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
RCH004c This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

Supplemental label information

As from 24 August 2023, adequate training is required before industrial or professional use

Contains

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE **30-60%**

CAS number: 101-68-8w **EC number: 202-966-0** **REACH registration number: 01-2119457014-47**

Classification
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Resp. Sens. 1 - H334
Skin Sens. 1 - H317
Carc. 2 - H351
STOT SE 3 - H335
STOT RE 2 - H373

2,2'DIMORPHOLINYLDIETHYL ETHER **1-5%**

CAS number: 6425-39-4 **EC number: 229-194-7** **REACH registration number: 01-2119969278-20-0000**

Classification
Eye Irrit. 2 - H319

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Remove affected person from source of contamination

Inhalation Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion DO NOT induce vomiting. Get medical attention immediately.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation Irritation of nose, throat and airway. Coughing, chest tightness, feeling of chest pressure.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause redness and irritation.

Eye contact Severe irritation, burning and tearing.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Irritating gases or vapours.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material.
Special protective equipment for firefighters	Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with non-combustible, absorbent material. Absorb spillage with noncombustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Avoid inhalation of vapours and spray/mists. Avoid contact with skin and eyes. Do not use in confined spaces without adequate ventilation and/or respirator. Spraying is permitted only in closed systems, spray cabinets or spray boxes with adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in closed original container at temperatures between 5°C and 25°C.
Storage class	Chemical storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Long-term exposure limit (8-hour TWA): WEL 0.02 mg/m3(Sen)
Short-term exposure limit (15-minute): WEL 0.07 mg/m3(Sen)
WEL = Workplace Exposure Limit.

Ingredient comments WEL = Workplace Exposure Limits

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE (CAS: 101-68-8)

DNEL

Workers - Inhalation; Short term systemic effects: 0.1 mg/m³
Workers - Dermal; Short term local effects: 28.7 mg/cm²
Workers - Inhalation; Short term local effects: 0.1 mg/m³
Workers - Inhalation; Long term systemic effects: 0.05 mg/m³
Workers - Inhalation; Long term local effects: 0.05 mg/m³
Consumer - Dermal; Short term systemic effects: 25 mg/kg bw/day
Workers - Dermal; Short term systemic effects: 50 mg/kg bw/day
Consumer - Oral; Short term systemic effects: 20 mg/kg bw/day
Consumer - Dermal; Short term local effects: 17.2 mg/cm²
Consumer - Inhalation; Short term local effects: 0.05 mg/m³
Consumer - Inhalation; Long term systemic effects: 0.025 mg/m³
Consumer - Inhalation; Long term local effects: 0.025 mg/m³
Consumer - Inhalation; Short term systemic effects: 0.05 mg/m³

PNEC

- marine water; 0.1 mg/l
- STP; 1 mg/l
- Fresh water; 1 mg/l
- Soil; 1 mg/kg

2,2'DIMORPHOLINYLDIETHYL ETHER (CAS: 6425-39-4)

DNEL

Workers - Inhalation; Long term systemic effects: 7.28 mg/m³
Workers - Dermal; Long term systemic effects: 1 mg/kg bw/day
Consumer - Inhalation; Long term systemic effects: 1.8 mg/m³
Consumer - Dermal; Long term systemic effects: 0.5 mg/kg bw/day
Consumer - Oral; Long term systemic effects: 0.5 mg/kg bw/day

PNEC

- Fresh water; 0.1 mg/l
- marine water; 0.01 mg/l
- Intermittent release; 1 mg/l
- Sediment (Freshwater); 8.2 mg/kg
- Sediment (Marinewater); 0.82 mg/kg
- STP; 100 mg/l
- Soil; 1.58 mg/kg

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients. This product is not to be used under conditions of poor ventilation. This product must not be handled in a confined space without adequate ventilation. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.
Eye/face protection	Wear chemical splash goggles.
Hand protection	It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination. Wear apron or protective clothing in case of contact.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Wash hands after handling. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: ABEK2-P3 Adequate ventilation would be not less than 3 to 5 air changes per hour in the work area. Open windows and doors to provide ventilation.
Environmental exposure controls	Keep container tightly sealed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Paste.
Colour	Cream.
Odour	Musty (mouldy).

Odour threshold	Not available.
pH	Not available.
Melting point	<10°C
Initial boiling point and range	330°C @ mbar
Flash point	>200°C Closed cup.
Evaporation rate	slow
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not available.
Vapour pressure	0.01 Pa @ °C
Vapour density	8.5
Relative density	1.10 @ 20°C
Bulk density	Not available.
Solubility(ies)	Insoluble in water. Hardens in contact with water.
Partition coefficient	Not available.
Auto-ignition temperature	>600°C
Decomposition Temperature	Not available.
Viscosity	Kinematic viscosity > 20.5 mm^2/s.
Explosive properties	Not available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not available.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	No information required.
Refractive index	Not available.
Particle size	Not available.
Molecular weight	Not available.
Volatility	Not available.
Saturation concentration	Not available.
Critical temperature	Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The product will harden into a solid mass in contact with water and moisture.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable. May polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid contact with water.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 10,000.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg) 10,000.0

Species Rabbit

Acute toxicity - inhalation

Species Rat

ATE inhalation (dusts/mists mg/l) 3.66

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation.
Animal data	Irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation	Sensitising.

Carcinogenicity

Carcinogenicity	Suspected carcinogen based on limited evidence.
Target organ for carcinogenicity	No specific target organs known.

Specific target organ toxicity - single exposure

STOT - single exposure	Asthma, pulmonary sensitisation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	may cause damage to organs through prolonged or repeated exposure

Aspiration hazard

Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.
Inhalation	Irritating to respiratory system. May cause sensitisation by inhalation.
Ingestion	May cause stomach pain or vomiting
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	Irritation of eyes and mucous membranes
Acute and chronic health hazards	May cause sensitisation by skin contact. The product contains small quantities of isocyanate. May cause respiratory allergy. May cause respiratory system irritation. May cause respiratory system irritation. Frequent inhalation of vapours may cause respiratory allergy.
Route of exposure	Inhalation Skin and/or eye contact
Medical symptoms	Irritation of eyes and mucous membranes. Coughing, chest tightness, feeling of chest pressure.
Medical considerations	Chronic respiratory and obstructive airway diseases.

Toxicological information on ingredients.

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	10,000.0
Species	Rat
ATE oral (mg/kg)	10,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	9,400.0
Species	Rabbit
ATE dermal (mg/kg)	9,400.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} dust/mist mg/l)	1.5
Species	Rat
ATE inhalation (dusts/mists mg/l)	1.5
Carcinogenicity	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

2,2'DIMORPHOLINYLDIETHYL ETHER

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	2,025.0
Species	Rat
Notes (oral LD_{50})	No information available.
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	3,038.0
Species	Rabbit
Notes (dermal LD_{50})	No information available.
Acute toxicity - inhalation	
Notes (inhalation LC_{50})	No information available.
Skin corrosion/irritation	
Skin corrosion/irritation	No information available.
Serious eye damage/irritation	
Serious eye damage/irritation	No information available.
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	
Skin sensitisation	No information available.
Carcinogenicity	
IARC carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Inhalation	May be harmful if inhaled. Spray/mists may cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin contact	May be absorbed through the skin. May be harmful in contact with skin. May cause skin irritation.
Eye contact	May cause eye irritation.

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish	LC50, 96 hours: > 1000 mg/l, Freshwater fish
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >500 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: ~ 1640 mg/l, Scenedesmus subspicatus

Ecological information on ingredients.

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: >1000 mg/l, Marinewater fish
Acute toxicity - aquatic invertebrates	EC_{50}, 24 hours: >1000 mg/l, Daphnia magna

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 10 mg/l, Daphnia magna

2,2'DIMORPHOLINYLDIETHYL ETHER

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 2150 mg/l,
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - microorganisms	EC_{50}, 3 hours: >1000 mg/l, Bacteria

12.2. Persistence and degradability

Persistence and degradability	The product is not readily biodegradable.
Stability (hydrolysis)	Reacts with water.
Biological oxygen demand	< 10 g O_2/g substance

12.3. Bioaccumulative potential

Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating.
Partition coefficient	Not available.

Ecological information on ingredients.

DIPHENYLMETHANE-4,4'-DI-ISOCYANATE

Partition coefficient	log Pow: 4.51

12.4. Mobility in soil

Mobility	The product is non-volatile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/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

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

SECTION 15: Regulatory information

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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). Control of Pollution Act 1974.
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Restrictions (Annex XVII Regulation 1907/2006)	Entry number: 56 Methylenediphenyl diisocyanate (MDI) Entry number: 74

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	Revised classification. Isocyanate training statement added to supplementary label information
Issued by	Compliance
Revision date	20/10/2022
Hazard statements in full	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.
Store Between	Store Between 5°C-25°C
Contains isocyanate	NO