SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name:	Amtico International Universal 2-Part Adhesive, Component B

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

Sector of Use:	SU19 Building and construction work SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen) For professional use only.
Product category	PC1 Adhesives, sealants
Application of the substance / the preparation	2-Comp. Polyurethane Adhesive (Component B)

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier:	Amtico International Kingfield Road, Coventry, CV6 5AA, UK Tel: +44(0)24 7686 1400 Fax: +44(0)24 7686 1552
Further information obtainable from:	Information department email: info@amtico.com

1.4. Emergency telephone number

+44 (0) 24 7686 1400 Opening hours: Mon - Fri 08:30-16:45

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	GHS08 health hazard Resp. Sens. 1 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. Carc. 2 H351 - Suspected of causing cancer. STOT RE 2 H373 - May cause damage to organs through prolonged or repeated exposure. Acute Tox. 4 H332 - Harmful if inhaled. Skin Irrit. 2 H315 - Causes skin irritation. Eye Irrit. 2 H319 - Causes serious eye irritation. Skin Sens. 1 H317 - May cause an allergic skin reaction. STOT SE 3 H335 - May cause respiratory irritation.
Information concerning particular hazards for human and environment:	The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008	The product is classified and labeling according to the CLP regulation.
Hazard Symbols:	GHS07 and GHS08 
Signal word	DANGER
Hazard determining components of labeling:	Contains: 4,4'-methylenediphenyl diisocyanate diphenylmethanediisocyanate, isomers and homologues
Hazard Statements	H332 Harmful if inhaled H315 Causes skin irritation H319 Causes serious eye irritation H334 May cause allergy or asthma symptoms 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	P201 Obtain special instructions before use. P280 Wear protective gloves/protective clothing/ eye protection/face 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. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P333+P313 If skin irritation or rash occurs. Get medical advice/attention. P337+P313 If eye irritation or rash occurs. Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P342+P311 If experiencing respiratory symptoms: Call a POISON ENTER/Doctor.

2.3. Other Hazards

EUH204 Contains isocyanates. May produce an allergic reaction.

Results of PBT and vPvB assessment.	
PBT:	Not applicable
vPvB:	Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Chemical characterization

Mixtures

3.2. Description

Polyurethane Adhesive (Component B)

3.3. Dangerous components

CAS: 9016-87-9	Diphenylmethanediisocyanate, isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	75-100%

3.4. Additional information

The full text for all Hazard Statements are displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information	Immediately remove any clothing soiled by the product. 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; consult doctor in case of complaints.In case of unconsciousness place patient stably in side position for transportation.
After skin contact	Immediately wash with water and soap and rinse thoroughly. If irritation occurs, seek medical attention.
After eye contact	Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing	Do not induce vomiting; call for medical help immediately.

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

Allergic reactions and asthma attacks

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

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:	CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents:	Water with full jet

5.2. Special hazards arising from the substance or mixture

No further relevant information available.

5.3. Advice for firefighters

Protective equipment: Mouth respiratory protective device.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation

6.2. Environmental precautions

Do not allow to enter sewers/ surface or ground water.

6.3. 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.

6.4. 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.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear suitable protective clothing, gloves and eye/face protection.

Immediately remove all soiled and contaminated clothing

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes and skin.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Wash hands before breaks and at the end of work.

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	Keep container tightly sealed. Protect from humidity and water.

7.2. Specific end use(s)

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace	
9016-87-9 diphenylmethanediisocyanate,isomeres and homologues	
WEL	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO

8.2. Exposure controls

Personal protective equipment	
General protective and hygienic measures	Immediately remove all soiled and contaminated clothing. Wear suitable protective clothing, gloves and eye/face protection. Keep away from foodstuffs, beverages and feed. Avoid contact with the eyes and skin. Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used. Wash hands before breaks and at the end of work.
Respiratory protection	Not necessary if room is well-ventilated.
Protection of hands	Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability. 
Material of gloves	Butyl rubber, BR Nitrile rubber, NBR Recommended thickness of the material: ≥ 0.5 mm
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 

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General Information	
Appearance:	
Form:	Fluid
Colour:	Brown
Odour:	Light
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	> 200°C
Ignition temperature:	400°C
Decomposition temperature:	Not determined.
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 25°C:	0.0001 hPa
Density at 20°C:	1.24 g/cm³
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Reacts with water
Partition coefficient (n-octanol/ water):	Determination not possible
Viscosity:	
Dynamic at 20°C:	250 mPas
Kinematic:	Not determined.

9.2. Other information

No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Will potentially react with acids. alcohols. amines. water, ammonia. bases. metal compounds, moist air and strong oxidizers.

10.2. Chemical stability

Thermal decomposition / conditions to be avoided:
From approx. 260°C, polymerization and separation of CO_2.

10.3. Possibility of hazardous reactions

May produce violent reactions with bases and numerous organic substances including alcohols and amines.

The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing and in extreme cases bursting of the container.

10.4. Conditions to avoid.

Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid moisture. Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.

10.5. Incompatible materials:

Uncontrolled exothermic reactions occur with amines and alcohols.

10.6. Hazardous decomposition products:

In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomer isocyanates, amines and alcohols may be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary irritant effect:	
On the skin:	Irritant to skin and mucous membranes.
On the eye:	Irritating effect.
Sensitization:	Sensitization possible through inhalation. Sensitization possible through skin contact.
Additional toxicological information:	
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:	Harmful Irritant
Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.	
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):	

Diphenylmethane-diisocyanate, isomers and homologues

Carcinogenicity: May cause cancer by inhalation. On the basis of these data classification as carcinogenic is therefore required (Carc. 2 H351).

Mutagenicity: In vitro and in vivo tests did not show mutagenic effects.

Teratogenicity: Did not show teratogenic effects in animal experiments.

Reproductive toxicity/Fertility: Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity:
Cures on contact with water to produce an insoluble polymer.

12.2. Persistence and degradability. No further relevant information available.

12.3. Bioaccumulative potential. No further relevant information available.

12.4. Mobility in soil. No further relevant information available.

Additional ecological information:
General notes: Do not allow product to reach ground water, water course or sewage system.

12.5. Results of PBT and vPvB assessment

PBT:
Not applicable.

vPvB:
Not applicable.

12.6. Other adverse effects. No further relevant information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recommendation:	Do not allow product to reach sewage system. Mix both product components, allow to harden, then dispose of as construction waste. Disposal should be in accordance with local, state or national legislation. Cured Universal 2 Part Adhesive Component B Waste Code 08 04 10

13.2. Uncleaned packaging

Recommendation:	Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Uncured Universal 2 Part Adhesive Component B Waste Code 08 05 01

SECTION 14: TRANSPORT INFORMATION

UN-Number ADR, ADN, IMDG, IATA	Not applicable
UN proper shipping name ADR, ADN, IMDG, IATA	Not applicable
Transport hazard class(es) ADR, ADN, IMDG, IATA Class	Not applicable
Packing group ADR, IMDG, IATA	Not applicable
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.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	-

SECTION 15: REGULATORY INFORMATION

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

No further relevant information available.

15.2. Chemical safety assessment:

A Chemical Safety Assessment has not been carried out

SECTION 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.

Relevant phrases	
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.
Recommended restriction of use For professional use only.	
Abbreviations and acronyms:	
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR:	Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
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
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent

* Data compared to the previous version altered.

Amtico International has prepared the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of this substance by a properly trained person using this substance. Individuals receiving the information shall exercise their independent judgment in determining its appropriateness for a particular purpose.

Attention of users is also drawn to possible risks which may arise if the substance is applied for purposes other than those for which it has been designed. The user takes full responsibility for knowing and taking the precautions related to the use of the substance.

The user shall ensure that they only refer to the latest version.