

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

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

1.1 Product identifier

Trade name

Binding agent for WIDOPERL

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

Relevant identified uses of the substance or mixture

binder designed for aggregate filling

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Widopan Produkte GmbH

Ostereichen 3

D-21714 Hammah

Telephone no. +49 (0) 4144 69821-0

Fax no. +49 (0) 4144 69821-20

Information provided by / telephone

+49 (0) 4144 69821-0

Advice on Safety Data Sheet

sdb_info@umco.de

Details of the importer

Address

Widopan Limited

System House

Horndon Industrial Park

24 Station Rd

West Horndon

Brentwood

CM13 3XL

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Acute Tox. 4; H332

Carc. 2; H351

Eye Irrit. 2; H319

Resp. Sens. 1; H334

Skin Irrit. 2; H315

Skin Sens. 1; H317

STOT RE 2; H373

STOT SE 3; H335

Classification information

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

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

Hazard pictograms



GHS07



GHS08

Signal word

Danger

Hazardous component(s) to be indicated on label:

Aromatic polyisocyanate prepolymer
 diphenylmethane-4,4'-diisocyanate
 diphenylmethane-2,4'-diisocyanate
 Aromatic polyisocyanate prepolymer
 diphenylmethanediisocyanate, isomeres and homologues
 2,2'-methylenediphenyl diisocyanate

Hazard statement(s)

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

Hazard statements (EU)

EUH204	Contains isocyanates. May produce an allergic reaction.
--------	---

Precautionary statement(s)

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

Supplemental label elements

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

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

Hazardous ingredients

No	Substance name	Classification (EC) 1272/2008 (CLP)	Additional information Concentration	%
	CAS / EC / Index / REACH no			
1	Aromatic polyisocyanate prepolymer			
	72088-97-2 - - -	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 STOT RE 2; H373	>= 25.00 - < 50.00	wt%
2	diphenylmethane-4,4'-diisocyanate			
	101-68-8 202-966-0 615-005-00-9 01-2119457014-47	Acute Tox. 4; H332 Carc. 2; H351 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT RE 2; H373i STOT SE 3; H335	>= 10.00 - < 25.00	wt%
3	diphenylmethane-2,4'-diisocyanate			
	5873-54-1 227-534-9 615-005-00-9 01-2119480143-45	Acute Tox. 4; H332 Carc. 2; H351 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT RE 2; H373i STOT SE 3; H335	>= 10.00 - < 25.00	wt%
4	Aromatic polyisocyanate prepolymer			
	67815-87-6 - - -	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Acute Tox. 4; H332 Resp. Sens. 1; H334 STOT SE 3; H335 STOT RE 2; H373	>= 10.00 - < 25.00	wt%
5	diphenylmethanediisocyanate, isomeres and homologues			
	9016-87-9 - 615-005-00-9 -	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Acute Tox. 4*; H332 Resp. Sens. 1; H334 STOT SE 3; H335 Carc. 2; H351 STOT RE 2*; H373**	>= 5.00 - < 10.00	wt%
6	2,2'-methylenediphenyl diisocyanate			
	2536-05-2 219-799-4 615-005-00-9 01-2119927323-43	Acute Tox. 4; H332 Carc. 2; H351 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT RE 2; H373i STOT SE 3; H335	< 2.50	wt%
7	tosyl isocyanate			

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB

4083-64-1 223-810-8 615-012-00-7 01-2119980050-47	EUH014 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Irrit. 2; H315 STOT SE 3; H335	< 2.50	wt%
--	---	--------	-----

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.

(*, **, ***, ****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	C, 2	Resp. Sens. 1; H334: C \geq 0.1% Eye Irrit. 2; H319: C \geq 5% Skin Irrit. 2; H315: C \geq 5% STOT SE 3; H335: C \geq 5%	-	-
3	C, 2	Resp. Sens. 1; H334: C \geq 0.1% Eye Irrit. 2; H319: C \geq 5% STOT SE 3; H335: C \geq 5% Skin Irrit. 2; H315: C \geq 5%	-	-
5	C, 2	Resp. Sens. 1; H334: C \geq 0.1% Skin Irrit. 2; H315: C \geq 5% Eye Irrit. 2; H319: C \geq 5% STOT SE 3; H335: C \geq 5%	-	-
6	C, 2	Resp. Sens. 1; H334: C \geq 0.1% Eye Irrit. 2; H319: C \geq 5% Skin Irrit. 2; H315: C \geq 5% STOT SE 3; H335: C \geq 5%	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

No	Route, target organ, concrete effect
2	H373i inhalational; -; -
3	H373i inhalational; -; -
6	H373i inhalational; -; -

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. If the patient is likely to become unconscious, place and transport in stable sideways position.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. Irregular breathing/no breathing: artificial respiration. Call a doctor immediately.

After skin contact

Wash off immediately with soap and water. Don't use solvents.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

After ingestion

Do not induce vomiting. Call a doctor immediately. Never give anything by mouth to an unconscious person. Rinse the mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB**4.3 Indication of any immediate medical attention and special treatment needed**

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam; Extinguishing powder; Water spray jet; Carbon dioxide

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixtureIn the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO); Isocyanate vapours. Traces of hydrogen cyanide.**5.3 Advice for firefighters**

Cool endangered containers with water spray jet. Use self-contained breathing apparatus. Suppress gases/vapours/mists with water spray jet. Wear protective clothing.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away from ignition sources.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning upCover up with damp, liquid absorbing material (e. g. sawdust, chemical binding material based on calcium silicate hydrate, sand). After 1 hour collect in stainless containers for waste material disposal. Do not seal containers (generation of CO₂)! Keep damp and let stand in a secured outdoor location for several days. Dispose according to section 13. Clean contaminated surfaces thoroughly with water. Decontaminate wash water (see item 7) and dispose of.**6.4 Reference to other sections**

No data available.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation. When filling, transferring, or emptying of containers, adequate suctioning close to work place necessary. Provide suitable exhaust ventilation at the processing machines. If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Keep ready a decontamination solution consisting of ammonia solution (190 g/l), water and ethanol (5 %, 50 %, 45 %).

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale vapours. Wash hands before breaks and after work. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

Vapours can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Precautions should be taken to minimise exposure to atmospheric humidity or water: CO₂ will be formed which in closed containers can result in pressurisation. DO NOT KEEP THE CONTAINERS SEALED !! Protect from heat and direct sunlight.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Keep only in the original container. Cover opened container with nitrogen in order to keep moisture away from the product.

Incompatible products

Do not store together with: oxidizing agents; Metals; Reducing agents; Keep away from water. Alcohols; Amines; Acids; Bases

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
List of approved workplace exposure limits (WELs) / EH40			
Isocyanates, all (as -NCO) Except methyl isocyanate			
	WEL short-term (15 min reference period)	0.07	mg/m ³
	WEL long-term (8-hr TWA reference period)	0.02	mg/m ³
	Comments	Sen	
2024/869/EC			
Diisocyanates (measured as NCO (10))			
	WEL long-term (8-hr TWA reference period)	0.006	mg/m ³ 12 ppm
	Skin resorption / sensibilisation	Skin (8) Dermal and respiratory sensitisation (9)	
	Comments	A limit value of 10 µg NCO/m ³ in relation to a reference period of 8 hours and a short-term exposure limit value of 20 µg NCO/m ³ shall apply until 31 December 2028.	
2	diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9
2024/869/EC			
Diisocyanates (measured as NCO (10))			
	WEL long-term (8-hr TWA reference period)	0.006	mg/m ³ 12 ppm
	Skin resorption / sensibilisation	Skin (8) Dermal and respiratory sensitisation (9)	
	Comments	A limit value of 10 µg NCO/m ³ in relation to a reference period of 8 hours and a short-term exposure limit value of 20 µg NCO/m ³ shall apply until 31 December 2028.	
3	diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	
List of approved workplace exposure limits (WELs) / EH40			
Isocyanates, all (as -NCO) Except methyl isocyanate			
	WEL short-term (15 min reference period)	0.07	mg/m ³
	WEL long-term (8-hr TWA reference period)	0.02	mg/m ³
	Comments	Sen	
2024/869/EC			
Diisocyanates (measured as NCO (10))			
	WEL long-term (8-hr TWA reference period)	0.006	mg/m ³ 12 ppm
	Skin resorption / sensibilisation	Skin (8) Dermal and respiratory sensitisation (9)	

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

	Comments	A limit value of 10 µg NCO/m ³ in relation to a reference period of 8 hours and a short-term exposure limit value of 20 µg NCO/m ³ shall apply until 31 December 2028.	
4	2,2'-methylenediphenyl diisocyanate	2536-05-2	219-799-4
List of approved workplace exposure limits (WELs) / EH40			
Isocyanates, all (as -NCO) Except methyl isocyanate			
	WEL short-term (15 min reference period)	0.07	mg/m ³
	WEL long-term (8-hr TWA reference period)	0.02	mg/m ³
	Comments	Sen	
2024/869/EC			
Diisocyanates (measured as NCO (10))			
	WEL long-term (8-hr TWA reference period)	0.006	mg/m ³ 12 ppm
	Skin resorption / sensibilisation	Skin (8) Dermal and respiratory sensitisation (9)	
	Comments	A limit value of 10 µg NCO/m ³ in relation to a reference period of 8 hours and a short-term exposure limit value of 20 µg NCO/m ³ shall apply until 31 December 2028.	

DNEL, DMEL and PNEC values**DNEL values (worker)**

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	diphenylmethane-4,4'-diisocyanate			101-68-8 202-966-0
	inhalative	Long term (chronic)	local	0.05 mg/m ³
	inhalative	Short term (acut)	local	0.1 mg/m ³
2	diphenylmethane-2,4'-diisocyanate			5873-54-1 227-534-9
	inhalative	Long term (chronic)	local	0.05 mg/m ³
	inhalative	Short term (acut)	local	0.1 mg/m ³
3	2,2'-methylenediphenyl diisocyanate			2536-05-2 219-799-4
	inhalative	Short term (acut)	local	0.1 mg/m ³
	inhalative	Long term (chronic)	local	0.05 mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	diphenylmethane-4,4'-diisocyanate			101-68-8 202-966-0
	inhalative	Long term (chronic)	local	0.025 mg/m ³
	inhalative	Short term (acut)	local	0.05 mg/m ³
2	diphenylmethane-2,4'-diisocyanate			5873-54-1 227-534-9
	inhalative	Long term (chronic)	local	0.025 mg/m ³
	inhalative	Short term (acut)	local	0.05 mg/m ³
3	2,2'-methylenediphenyl diisocyanate			2536-05-2 219-799-4
	inhalative	Short term (acut)	local	0.05 mg/m ³
	inhalative	Long term (chronic)	local	0.025 mg/m ³

PNEC values

No	Substance name		CAS / EC no
	ecological compartment	Type	Value
1	diphenylmethane-4,4'-diisocyanate		101-68-8 202-966-0
	water	fresh water	3.7 µg/L
	water	marine water	0.37 µg/L

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB

	water	fresh water sediment	11.7	mg/kg dry weight
	water	marine water sediment	1.17	mg/kg dry weight
	soil	-	2.33	mg/kg dry weight
	sewage treatment plant	-	1	mg/L
2	diphenylmethane-2,4'-diisocyanate		5873-54-1 227-534-9	
	water	fresh water	3.7	µg/L
	water	marine water	0.37	µg/L
	water	fresh water sediment	11.7	mg/kg dry weight
	water	marine water sediment	1.17	mg/kg dry weight
	soil	-	2.33	mg/kg dry weight
3	2,2'-methylenediphenyl diisocyanate		2536-05-2 219-799-4	
	water	fresh water	3.7	µg/L
	water	marine water	0.37	µg/L
	water	fresh water sediment	11.7	mg/kg dry weight
	water	marine water sediment	1.17	mg/kg dry weight
	soil	-	2.33	mg/kg dry weight

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

In case of insufficient ventilation and during spray application respiratory protection necessary. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material Polychloroprene
 Appropriate Material nitrile rubber
 Appropriate Material butyl rubber
 Appropriate Material fluorintated rubber

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

9.1 Information on basic physical and chemical properties

State of aggregation	
liquid	
Form	
liquid	
Colour	
dark brown	
Odour	
slightly aromatic	
pH value	
reason for missing pH	substance/mixture is non-soluble (in water)
Boiling point / boiling range	
Value	> 350 °C
Melting point/freezing point	
No data available	
Setting point / solidification range	
Value	< 0 °C
Decomposition temperature	
Value	> 260 °C
Flash point	
Value	> 200 °C
Ignition temperature	
Value	> 400 °C
Flammability	
No data available	
Lower explosion limit	
No data available	
Upper explosion limit	
No data available	
Vapour pressure	
Value	< 0.0000 mbar
Reference temperature	20 °C
Reference substance	Diphenylmethane-4,4'-di-isocyanate
Relative vapour density	
No data available	
Relative density	
No data available	
Density	
Value	appr. 1.22 g/cm ³
Reference temperature	23 °C
Method	DIN 53217
Solubility in water	
Comments	insoluble
Comments	Reacts with water

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB

Solubility	
No data available	

Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
log Pow		4.51	
Reference temperature		22	°C
with reference to		pH 7	
Method		OECD 117	
Source		ECHA	
2	diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9
log Pow		4.51	
Reference temperature		22	°C
with reference to		pH 7	
Method		OECD 117	
Source		ECHA	

Kinematic viscosity			
Value	appr.	250	sec
Reference temperature		23	°C
Type	Efflux time		
Method	DIN 53211 (4 mm)		

Particle characteristics	
No data available	

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Moisture; Heat

10.5 Incompatible materials

Oxidizing agents; Metals; Reducing agents; Alcohols; Acids; Bases; Amines; Water

10.6 Hazardous decomposition products

In case of fire the following can be released: Isocyanate vapours; Traces of hydrogen cyanide

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute oral toxicity
No data available

Acute dermal toxicity
No data available

Acute inhalational toxicity (result of the ATE calculation for the mixture)

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB

Product Name	
Binding agent for WIDOPERL	
ATE (Mixture)	18.5431 mg/l
Route of exposure / physical from Method	Vapour Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute inhalational toxicity
No data available

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
Duration of exposure		4	h
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		irritant	
Evaluation/classification		Based on available data, the classification criteria are met.	

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	
Evaluation/classification		Based on available data, the classification criteria are met.	

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
Route of exposure		respiratory tract	
Species		guinea pig	
Source		ECHA	
Evaluation		sensitizing	
Evaluation/classification		Based on available data, the classification criteria are met.	
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		sensitizing	
Evaluation/classification		Based on available data, the classification criteria are met.	
2	2,2'-methylenediphenyl diisocyanate	2536-05-2	219-799-4
Route of exposure		Skin	
Species		mouse	
Method		OECD 429	
Source		ECHA	
Evaluation		sensitizing	
Evaluation/classification		Based on available data, the classification criteria are met.	

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
Type of examination		in vitro gene mutation study in bacteria	
Species		S. typhimurium TA 1535, TA 1537, TA 98 and TA 100	
Method		EU Method B.13/14	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9
Type of examination		in vitro gene mutation study in bacteria	

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB

Species	Salmonella typhimurium
Method	OECD 471
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
3	2,2'-methylenebis(4-chlorophenyl) diisocyanate 2536-05-2 219-799-4
Type of examination	Bacterial Reverse Mutation Test
Species	S. typhimurium TA 1535, TA 1537, TA 98, TA 100 and TA 102
Method	OECD 471
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Reproduction toxicity

No data available

Carcinogenicity

No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
Route of exposure		inhalational	
NOAEC		0.7	mg/m ³
Duration of exposure		2	year(s)
Species		rat	
Method		87/302/EEC, Part B, p37	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are met.	

STOT - single exposure

No data available

STOT - repeated exposure

No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
Route of exposure		inhalational	
LOAEC		0.23	mg/m ³
Species		rat	
Method		87/302/EEC, Part B, p37	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are met.	

Aspiration hazard

No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

In case of overexposure – especially during spraying applications without observed safety measures – danger of eye, nose, throat and airways irritation. Delayed appearance of difficulties and development of hypersensitivity (difficult breathing, coughing, and asthma) are possible. There may be hypersensitive persons who develop reactions following exposure to very low concentrations of isocyanates, even below the threshold limit value at the workplace. Tanning and irritating effects are possible at prolonged skin contact.

11.2 Information on other hazards**Endocrine disrupting properties**

No data available

Other information

No data available.

SECTION 12: Ecological information**12.1 Toxicity****Toxicity to fish (acute)**

No data available

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB

Toxicity to fish (chronic)
No data available
Toxicity to Daphnia (acute)
No data available
Toxicity to Daphnia (chronic)
No data available
Toxicity to algae (acute)
No data available
Toxicity to algae (chronic)
No data available
Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
Type		aerobic biodegradation	
Value		0	%
Duration		28	d
Method		OECD 301 F	
Source		ECHA	
Evaluation		not readily biodegradable	

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
BCF		92	- 200
Species		Cyprinus carpio	
Method		OECD 305 E	
Source		ECHA	
2	diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9
BCF		92	- 200
Method		OECD 305 E	
Source		ECHA	

Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0
log Pow		4.51	
Reference temperature		22	°C
with reference to		pH 7	
Method		OECD 117	
Source		ECHA	
2	diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9
log Pow		4.51	
Reference temperature		22	°C
with reference to		pH 7	
Method		OECD 117	
Source		ECHA	

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

Results of PBT and vPvB assessment			
No	Substance name	CAS no.	EC no.
1	diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9
PBT assessment		The substance is not PBT.	
vPvB assessment		The substance is not vPvB.	
Source		ECHA	

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not discharge into drains or waters and do not dispose of in public landfills.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer. Empty containers should be disposed of only after removing product residues adhering to container walls, by the reaction with a decontaminating solution (see item 7).

SECTION 14: Transport information

14.1 UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2 UN proper shipping name

Not classified as dangerous in the meaning of transport regulations.

14.3 Transport hazard class(es)

Not classified as dangerous in the meaning of transport regulations.

14.4 Packing group

Not classified as dangerous in the meaning of transport regulations.

14.5 Environmental hazards

Not classified as dangerous in the meaning of transport regulations.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
--

Trade name: Binding agent for WIDOPERL**Current version:** 8.0.0, Revision: 01.04.2026**Replaced version:** 7.2.0, Revision: 24.07.2025**Region:** GB

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	2,2'-methylenediphenyl diisocyanate	2536-05-2	219-799-4	56, 74, 75, 77
2	dibutyltin-dilaurate	77-58-7	201-039-8	75
3	diphenylmethane-2,4'-diisocyanate	5873-54-1	227-534-9	56, 74, 75, 77
4	diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0	56, 74, 75, 77
5	diphenylmethanediisocyanate, isomeres and homologues	9016-87-9	-	56, 74, 75, 77
6	tosyl isocyanate	4083-64-1	223-810-8	75

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

This product is not subject to Part 1 or 2 of Annex I.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

EUH014

Reacts violently with water.

H373i

May cause damage to organs through prolonged or repeated exposure if inhaled.

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

C

Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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.

Trade name: Binding agent for WIDOPERL

Current version: 8.0.0, Revision: 01.04.2026

Replaced version: 7.2.0, Revision: 24.07.2025

Region: GB

Creation of the safety data sheet

UMCO GmbH

Georg-Wilhelm-Str. 187, D-21107 Hamburg

Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

Copyright-protected document. Any changes or reproductions require the express consent of UMCO GmbH.

Prod-ID 21790