

SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

AnchorPro PU948 PU Adhesive

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

1.1 Product identifier:

Product name : AnchorPro PU948 PU Adhesive

Product type REACH

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

1.2.1 Relevant identified uses

Adhesive

1.2.2 Uses advised against

No uses advised against known

1.3 Details of the supplier of the safety data sheet:

Supplier of the safety data sheet

Redwood UK Ltd 18 Arnside Road Waterlooville PO7 7UP sales@redwood-uk.com 02392233310

Manufacturer of the product

Redwood UK Ltd 18 Arnside Road Waterlooville PO7 7UP sales@redwood-uk.com 02392233310

1.4 Emergency telephone number:

24h/24h (02392233310)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification according to Regulation EC No 1272/2008

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Carc.	category 2	H351: Suspected of causing cancer.
Acute Tox.	category 4	H332: Harmful if inhaled.
STOT RE	category 2	H373: May cause damage to organs through prolonged or repeated exposure if inhaled.
Eye Irrit.	category 2	H319: Causes serious eye irritation.
STOT SE	category 3	H335: May cause respiratory irritation.
Skin Irrit.	category 2	H315: Causes skin irritation.
Resp. Sens.	category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens.	category 1	H317: May cause an allergic skin reaction.

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC

Carc. Cat. 3; R40 - Limited evidence of a carcinogenic effect

Xn; R20 - 48/20 - Harmful by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Xi; R36/37/38 - Irritating to eyes, respiratory system and skin.

R42/43 - May cause sensitisation by inhalation and skin contact.

2.2 Label elements:

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

Drawn up according to the criteria of Regulation (EU) No 487/2013, 4th adaptation of Regulation (EC) No 1272/2008

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

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Reason for revision: ATP4

Revision number: 0300

Publication date: 2007-08-16 Date of revision: 2014-07-02

Product number: 45246 1/15





Contains: polymethylene polyphenyl isocyanate.

Signal word	Danger
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H-statements

H351 Suspected of causing cancer.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H315 Causes skin irritation.

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

H317 May cause an allergic skin reaction.

P-statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves and eye protection/face protection.

P284 Wear respiratory protection.
P260 Do not breathe vapours/mist.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P302 + P352 IF ON SKIN: Wash with plenty of water and soap.
P362 + P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Supplemental information

- Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
- Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
- 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.

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Labels



Harmful

Contains: polymethylene polyphenyl isocyanate.

R-phrases

20 Harmful by inhalation

36/37/38 Irritating to eyes, respiratory system and skin 40 Limited evidence of a carcinogenic effect

42/43 May cause sensitisation by inhalation and skin contact

48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation

S-phrases

(02) (Keep out of the reach of children)

23 Do not breathe vapour

36/37 Wear suitable protective clothing and gloves

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

(63) (In case of accident by inhalation: remove casualty to fresh air and keep at rest)

Additional recommendations

Contains isocyanates. See information supplied by the manufacturer.

- $\hbox{-} Persons already sensitised to diisocyanates \, may \, develop \, allergic \, reactions \, when \, using \, this \, product.$
- Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
- 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.

2.3 Other hazards:

CLP

No other hazards known

DSD/DPD

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No other hazards known

SECTION 3: Composition/information on ingredients

3.1 Substances:

Not applicable

3.2 Mixtures:

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to DSD/DPD	Classification according to CLP	Note	Remark
aromatic hydrocarbons, C8 01-2119486136-34	90989-38-1 292-694-9	1% <c<10%< td=""><td>Xi; R38 R10</td><td>Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Asp. Tox. 1; H304 Skin Irrit. 2; H315</td><td>(1)(2)(10)</td><td>UVCB</td></c<10%<>	Xi; R38 R10	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Asp. Tox. 1; H304 Skin Irrit. 2; H315	(1)(2)(10)	UVCB
polymethylene polyphenyl isocyanate	9016-87-9	C>25 %	Xn; R20 - 48/20 Xi; R36/37/38 R42/43	Carc. 2; H351 Acute Tox. 4; H332 STOT RE 2; H373 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315 Resp. Sens. 1; H334 Skin Sens. 1; H317	(1)(2)(10)	Polymer

⁽¹⁾ For R-phrases and H-statements in full: see heading 16

SECTION 4: First aid measures

4.1 Description of first aid measures:

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Runny nose. EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression. Dizziness. Narcosis. Headache. Disturbances of consciousness.

After skin contact:

Tingling/irritation of the skin.

After eye contact:

Irritation of the eye tissue.

After ingestion:

AFTER ABSORPTION OF HIGH QUANTITIES: Central nervous system depression. Enlargement/affection of the liver. Symptoms similar to those listed under inhalation.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

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⁽²⁾ Substance with a Community workplace exposure limit

⁽¹⁰⁾ Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

5.1.1 Suitable extinguishing media:

Water spray. Polyvalent foam. BC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide). On heating: release of toxic/combustible gases/vapours (hydrogen cyanide).

5.3 Advice for firefighters:

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Do not move the load if exposed to heat. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Face-shield. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Face-shield. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2 Environmental precautions:

Contain leaking substance. Dam up the liquid spill. Prevent spreading in sewers. Use appropriate containment to avoid environmental contamination.

6.3 Methods and material for containment and cleaning up:

Allow product to solidify and remove it by mechanical means. Clean (treat) contaminated surfaces with acetone. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4 Reference to other sections:

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1 Precautions for safe handling:

Keep away from naked flames/heat. Gas/vapour heavier than air at 20°C. Observe very strict hygiene - avoid contact. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

Store at room temperature. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources, (strong) acids, (strong) bases.

7.2.3 Suitable packaging material:

Synthetic material.

7.2.4 Non suitable packaging material:

No data available

7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

The Netherlands

Xyleen (o-,m- en p-isomeren)	Time-weighted average exposure limit 8 h	48 ppm	Public occupational exposure limit value
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Xyleen (o-,m- en p-isomeren)	Time-weighted average exposure limit 8 h	210 mg/m ³	Public occupational exposure limit value
	Short time value	100 ppm	Public occupational exposure limit value
	Short time value	442 mg/m ³	Public occupational exposure limit value
EU			
Xylene, mixed isomers, pure	Time-weighted average exposure limit 8 h	50 ppm	Indicative occupational exposure limit value
	Time-weighted average exposure limit 8 h	221 mg/m ³	Indicative occupational exposure limit value
	Short time value	100 ppm	Indicative occupational exposure limit value
	Short time value	442 mg/m ³	Indicative occupational exposure limit value

Belgium

Xylène, isomères mixtes, purs	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	221 mg/m³
	Short time value	100 ppm
	Short time value	442 mg/m³

USA (TLV-ACGIH)

Xylene (all isomers)	Time-weighted average exposure limit 8 h	100 ppm	TLV - Adopted Value
	Short time value	150 ppm	TLV - Adopted Value

Germany

pMDI (als MDI berechnet)	Time-weighted average exposure limit 8 h	0.05 mg/m ³	TRGS 900
Xylol (alle Isomeren)	Time-weighted average exposure limit 8 h	100 ppm	TRGS 900
	Time-weighted average exposure limit 8 h	440 mg/m³	TRGS 900

France

Xylènes, isomères mixtes, purs	Time-weighted average exposure limit 8 h	50 ppm	VRC: Valeur réglementaire contraignante
	Time-weighted average exposure limit 8 h	221 mg/m ³	VRC: Valeur réglementaire contraignante
	Short time value	100 ppm	VRC: Valeur réglementaire contraignante
	Short time value	442 mg/m³	VRC: Valeur réglementaire contraignante

UK

Isocyanates, all (as -NCO) Except methyl isocyanate	Time-weighted average exposure limit 8 h	0.02 mg/m ³	Workplace exposure limit (EH40/2005)
	Short time value	0.07 mg/m ³	Workplace exposure limit (EH40/2005)
Xylene, o-,m-,p- or mixed isomers	Time-weighted average exposure limit 8 h	50 ppm	Workplace exposure limit (EH40/2005)
	Time-weighted average exposure limit 8 h	220 mg/m³	Workplace exposure limit (EH40/2005)
	Short time value	100 ppm	Workplace exposure limit (EH40/2005)
	Short time value	441 mg/m ³	Workplace exposure limit (EH40/2005)

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL - Workers

aromatic hydrocarbons, C8

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	77 mg/m ³	
	Acute systemic effects inhalation	289 mg/m ³	
	Long-term local effects inhalation	870 mg/m³	
	Long-term systemic effects dermal	180 mg/kg bw/day	

DNEL - General population

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aromatic hydrocarbons, C8

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	14.8 mg/m³	
	Acute systemic effects inhalation	174 mg/m³	
	Long-term local effects inhalation	870 mg/m³	
	Long-term systemic effects dermal	108 mg/kg bw/day	
	Long-term systemic effects oral	1.6 mg/kg bw/day	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

c) Eye protection:

Face shield.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical form	Liquid
Odour	Solvent-like odour
Odour threshold	No data available
Colour	Brown
Particle size	Not applicable (liquid)
Explosion limits	No data available
Flammability	Non-flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Flash point	Not applicable
Evaporation rate	No data available
Relative vapour density	>2
Vapour pressure	No data available
Solubility	water ; insoluble
Relative density	1.1; 20°C
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
рН	No data available

Physical hazards

No physical hazard class

9.2 Other information:

Absolute density	1100 kg/m³ ; 20 °C

SECTION 10: Stability and reactivity

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10.1 Reactivity:

Heating increases the fire hazard. No data available.

10.2 Chemical stability:

Stable under normal conditions.

10.3 Possibility of hazardous reactions:

Reacts violently with (some) acids/bases.

10.4 Conditions to avoid:

Keep away from naked flames/heat.

10.5 Incompatible materials:

(strong) acids, (strong) bases.

10.6 Hazardous decomposition products:

On heating: release of toxic/combustible gases/vapours (hydrogen cyanide). On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

AnchorPro PU948 PU Adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

Route of exposure	Parameter	Method	Value	Exposure time	Species		Value determination
Oral	LD50	Equivalent to OECD 401	3523 mg/kg bw		Rat	Male	Experimental value
Oral	LD50	Equivalent to OECD 401	>4000 mg/kg bw		Rat	Female	Experimental value
Dermal	LD50	Other	>4200 mg/kg bw	4 h	Rabbit	Male	Weight of evidence
Inhalation (vapours)	LC50	Equivalent to OECD 403	29 mg/l	4 h	Rat	Male	Experimental value

polymethylene polyphenyl isocyanate

Route of exposure	Parameter	Method	Value	Exposure time	Species	 Value determination
Oral	LD50		> 10000 mg/kg		Rat	Literature study
Dermal	LD50		> 5000 mg/kg		Rabbit	Literature study
Inhalation (vapours)	LD50		10-20 mg/l	4 h	Rat	Literature study

Classification is based on the relevant ingredients

Conclusion

Harmful if inhaled.

Low acute toxicity by the dermal route

Low acute toxicity by the oral route

Corrosion/irritation

AnchorPro PU948 PU Adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

Eye Moderately Other 72 hours Rabbit	Weight of evidence
intraung	weight of evidence
Skin Irritating Other 24; 72 hours Rabbit	Weight of evidence

polymethylene polyphenyl isocyanate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination
Eye	Irritating					Literature study
Skin	Irritating					Literature study
Inhalation	Irritating					Literature study

Classification is based on the relevant ingredients

Conclusion

Causes skin irritation.

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Causes serious eye irritation.

May cause respiratory irritation.

Specific target organ toxicity, single exposure: classified as irritant to respiratory organs

Respiratory or skin sensitisation

AnchorPro PU948 PU Adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

Route of exposure	Result	Method	 Observation time point	Species	 Value determination
Skin	Not sensitizing	OECD 429		Mouse	Weight of evidence

polymethylene polyphenyl isocyanate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	 Value determination
Skin	Sensitizing					Literature study
Inhalation	Sensitizing					Literature study

Classification is based on the relevant ingredients

Conclusion

May cause an allergic skin reaction.

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

Specific target organ toxicity

AnchorPro PU948 PU Adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species		Value determination
Oral	LOAEL	Equivalent to	150 mg/kg	Liver; kidney	Weight gain	90 day(s)	Rat	Male/femal	Experimental
		OECD 408	bw/day					e	value

polymethylene polyphenyl isocyanate

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	 Value determination
Inhalation			STOT RE cat.2					Literature study

Classification is based on the relevant ingredients

Conclusion

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

Mutagenicity (in vitro)

AnchorPro PU948 PU Adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

Result	Method	Test substrate	Effect	Value determination
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)		Experimental value
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 479	Chinese hamster ovary (CHO)		Experimental value

Mutagenicity (in vivo)

AnchorPro PU948 PU Adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

Result	Method	Exposure time	Test substrate	Gender	Organ	Value determination
Negative	Equivalent to OECD		Rat	Male/female		Experimental value
	473					

Carcinogenicity

AnchorPro PU948 PU Adhesive

No (test)data on the mixture available

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aromatic hydrocarbons, C8

Route of exposure	Parameter	Method	Value	Exposure time	Species		Value determination	Organ	Effect
Oral	_		. ,. 0, 0	103 weeks (daily, 5 days/week)	Mouse	Male/female	Experimental value		

polymethylene polyphenyl isocyanate

Route of exposure	Parameter	Method	Value	Exposure time	Species	 Value determination	Organ	Effect
Inhalation (aerosol)			category 2		Rat	Literature study		Neoplastic effects

Reproductive toxicity

AnchorPro PU 948 PU Adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

	Parameter	Method		Exposure time	Species	Gender	Effect	6	Value determination
Developmental toxicity	NOAEC	Equivalent to OECD 414	100 ppm		Rat		Fetotoxicity	Foetus	Experimental value
	NOAEC	Equivalent to OECD 414	>2000 ppm		Rat		Teratogenicit Y		Experimental value
Maternal toxicity	NOAEC	Equivalent to OECD 414	500 ppm				Maternal toxicity		Experimental value
Effects on fertility	NOAEC (P)	Equivalent to OECD 416	>500		Rat	Male/female	No effect		Experimental value

Classification is based on the relevant ingredients

Conclusion CMR

Suspected of causing cancer.

Not classified for mutagenic or genotoxic toxicity

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

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No (test)data on the mixture available

Chronic effects from short and long-term exposure

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ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Itching. Skin rash/inflammation. Respiratory difficulties.

SECTION 12: Ecological information

12.1 Toxicity:

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No (test)data on the mixture available

aromatic hydrocarbons, C8

	Parameter	Method	Value	Duration	Species		Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	2.6 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Read-across
Acute toxicity invertebrates	EC50		3.82 mg/l	48 h		Flow-through system	Fresh water	Read-across
Toxicity algae and other aquatic plants	ErC50	OECD 201	4.36 mg/l	73 h	Pseudokirchneriel la subcapitata	Static system	Fresh water	Read-across; GLP
Long-term toxicity fish	NOEC		> 1.3 mg/l	56 day(s)		Flow-through system	Fresh water	Experimental value
Long-term toxicity aquatic invertebrates	NOEC	OECD 211	1.57 mg/l	21 day(s)	Daphnia magna	Static system	Fresh water	Read-across; GLP

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polymethylene polyphenyl isocyanate

	Parameter	Method	Value	Duration	Species	 Fresh/salt water	Value determination
Acute toxicity other aquatic organisms	LC50		>1000 mg/l	96 h			Literature study
Toxicity aquatic micro- organisms	EC50	OECD 209	>100 mg/l		Activated sludge		Literature study

Judgement is based on the relevant ingredients of the mixture

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

Not classified as dangerous for the environment according to the criteria of Directive 1999/45/EC

12.2 Persistence and degradability:

aromatic hydrocarbons, C8

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F: Manometric Respirometry Test	87.8 %	28 day(s)	Read-across

polymethylene polyphenyl isocyanate

Biodegradation water

Method	Value	Duration	Value determination
OECD 302C: Inherent Biodegradability:	< 60 %		Experimental value
Modified MITI Test (II)			

Conclusion

Contains non readily biodegradable component(s)

12.3 Bioaccumulative potential:

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Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

aromatic hydrocarbons, C8

BCF fishes

Par	rameter	Method	Value	Duration	Species	Value determination
BCF	=		25.9	56 day(s)	Oncorhynchus mykiss	Similar product

Log Kow

Method	Remark	Value	Temperature	Value determination
Other		3.15	20 ℃	Conclusion by analogy

polymethylene polyphenyl isocyanate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		1		Pisces	Literature study

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

Conclusion

Does not contain bioaccumulative component(s)

12.4 Mobility in soil:

aromatic hydrocarbons, C8

(log) Koc

1	Parameter	Method	Value	Value determination
	log Koc	IOECD 121	2.73	Read-across

Conclusion

Contains component(s) with potential for mobility in the soil

12.5 Results of PBT and vPvB assessment:

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6 Other adverse effects:

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Global warming potential (GWP)

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None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

aromatic hydrocarbons, C8

Ground water

Ground water pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1 Waste treatment methods:

13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

13.1.2 Disposal methods

Incinerate under surveillance with energy recovery. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment.

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

Transport	Not subject	
14.2 UN proper shipping name:		
14.3 Transport hazard class(es):		
Hazard identification number		
Class		
Classification code		
4.4 Packing group:	<u> </u>	
Packing group		
Labels		
4.5 Environmental hazards:	<u> </u>	
Environmentally hazardous substance mark	no	
4.6 Special precautions for user:	,	
Special provisions		
Limited quantities		
I (RID)		
I (RID) 14.1 UN number: Transport		
I (RID) 4.1 UN number: Transport 4.2 UN proper shipping name:	Not subject	
I (RID) 4.1 UN number: Transport 4.2 UN proper shipping name:	Not subject	
4.1 UN number: Transport 4.2 UN proper shipping name:	Not subject	
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es):	Not subject	
I (RID) 4.1 UN number: Transport 4.2 UN proper shipping name: 4.3 Transport hazard class(es): Hazard identification number	Not subject	
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Hazard identification number Class Classification code	Not subject	
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Hazard identification number Class Classification code	Not subject	
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Hazard identification number Class Classification code 14.4 Packing group: Packing group Labels	Not subject	
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Hazard identification number Class Classification code 14.4 Packing group: Packing group Labels	Not subject	
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Hazard identification number Class Classification code 14.4 Packing group: Packing group Labels 14.5 Environmental hazards: Environmentally hazardous substance mark	Not subject	
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Hazard identification number Class Classification code 14.4 Packing group: Packing group Labels 14.5 Environmental hazards: Environmentally hazardous substance mark		
I (RID) 14.1 UN number: Transport 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Hazard identification number Class Classification code 14.4 Packing group: Packing group Labels 14.5 Environmental hazards:		

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Transport	Not subject
4.2 UN proper shipping name:	
4.3 Transport hazard class(es):	
Class	
Classification code	
4.4 Packing group:	
Packing group	
Labels	
4.5 Environmental hazards:	
Environmentally hazardous substance mark	no
4.6 Special precautions for user:	
Special provisions	
Limited quantities	
(IMDG/IMSBC)	
4.1 UN number:	
Transport	Not subject
4.2 UN proper shipping name:	
4.3 Transport hazard class(es):	
Class	
4.4 Packing group:	
Packing group	
Labels	
4.5 Environmental hazards:	
Marine pollutant	-
Environmentally hazardous substance mark	no
4.6 Special precautions for user:	
Special provisions	
Limited quantities	
4.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC	
Annex II of MARPOL 73/78	Not applicable, based on available data
(ICAO-TI/IATA-DGR)	
4.1 UN number:	
Transport	Not subject
4.2 UN proper shipping name:	
4.3 Transport hazard class(es):	
Class	
4.4 Packing group:	
Packing group	
Labels	
4.5 Environmental hazards:	
Environmentally hazardous substance mark	no
4.6 Special precautions for user:	
Special provisions	
Passenger and cargo transport: limited quantities: maximum net quant	ity
per packaging	
ON 15: Regulatory information	
. Safety, health and environmental regulations/legislatio	n specific for the substance or mixture:
uropean legislation:	
VOC content Directive 2010/75/EU	
	uo uo auto
VOC content 7 %	remarks
VOC content Directive 2004/42/EC	
77 - //	
// g/	
77 g/l	

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REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· #500345# · polymethylene polyphenyl isocyanate	Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage"; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with A
-#500345#	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — "whoopee" cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: "For professional users only".3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC.4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.
· polymethylene polyphenyl isocyanate	Methylenediphenyl diisocyanate (MDI) including the following specific isomers: 4,4'-Methylenediphenyl diisocyanate; 2,4'-Methylenediphenyl diisocyanate; 2,2'-Methylenediphenyl diisocyanate	1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging: (a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC; (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures: "— Persons already sensitised to diisocyanates may develop allergic reactions when using this product. — Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. — 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.2. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives.

Reference legislation

See column 1: 3.

See column 1: 40.

See column 1: 56.

Recommandations REACH annex XVII

- Persons already sensitised to diisocyanates may develop allergic reactions when using this product.

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National legislation The Netherlands

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Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 03
Waterbezwaarlijkheid	1

aromatic hydrocarbons, C8

SZW - List of carcinogenic substances	Listed in SZW-list of carcinogenic substances
SZW - List of mutagenic substances	Listed in SZW-list of mutagenic substances
SZW - List of reprotoxic substances (development)	Possibly hazardous to the foetus

National legislation Germany

AnchorPro PU948 PU Adhesive

WGK	1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender
	Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

aromatic hydrocarbons, C8

TA-Luft	TA-Luft Klasse 5.2.5/I
Schwangerschaft Gruppe	D
MAK 8-Stunden-Mittelwert	Xylol (alle Isomeren); 100 ppm
ppm	
	Xylol (alle Isomeren); 440 mg/m³
mg/m³	

polymethylene polyphenyl isocyanate

orymetriyierie polypriettyi isocyanate		
TRGS905 - Krebserzeugend	3	
TRGS905 - Erbgutverändernd	-	
TRGS905 - Fruchtbarkeitsgefährdend	-	
TRGS905 - Fruchtschädigend	-	
MAK - Krebserzeugend Kategorie	4	
Schwangerschaft Gruppe	c	
MAK 8-Stunden-Mittelwert mg/m³	"polymeres MDI" (einatembare Fraktion); 0.05 mg/m³; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191)	

National legislation France

AnchorPro PU948 PU Adhesive

No data available

National legislation Belgium

AnchorPro PU948 PU Adhesive

No data available

15.2 Chemical safety assessment:

No chemical safety assessment is required.

SECTION 16: Other information

Full text of any R-phrases referred to under headings 2 and 3:

R10 Flammable

R20 Harmful by inhalation

R20/21 Harmful by inhalation and in contact with skin

R36/37/38 Irritating to eyes, respiratory system and skin

R38 Irritating to skin

R40 Limited evidence of a carcinogenic effect

R42/43 May cause sensitisation by inhalation and skin contact

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation

R65 Harmful: may cause lung damage if swallowed

Full text of any H-statements referred to under headings 2 and 3:

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

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H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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