

SAFETY DATA SHEET

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

Purocol Express

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier: Product name : Purocol Express Registration number REACH : Not applicable (mixture) Product type REACH : Mixture 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 SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout **2** +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com Manufacturer of the product SOUDAL N.V. Everdongenlaan 18-20 B-2300 Turnhout **2** +32 14 42 42 31 +32 14 42 65 14 msds@soudal.com 1.4 Emergency telephone number: 24h/24h (Telephone advice: English, French, German, Dutch): +32 14 58 45 45 (BIG) 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 Hazard statements Class Category Carc. category 2 H351: Suspected of causing cancer. H373: May cause damage to organs through prolonged or repeated exposure if inhaled. STOT RE category 2 Eye Irrit. category 2 H319: Causes serious eye irritation. H335: May cause respiratory irritation. STOT SE category 3 Skin Irrit. H315: Causes skin irritation. category 2 Resp. Sens. H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. category 1 Skin Sens. H317: May cause an allergic skin reaction. category 1

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; R48/20 - 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)



Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG) Technische Schoolstraat 43 A, B-2440 Geel http://www.big.be © BIG vzw Reason for revision: 3.2

Revision number: 0302

Product number: 38899

Publication date: 2003-01-30

Date of revision: 2015-03-11

1/16

134-15960-465-en

	Purocol Express
Contains: 4,4'-methylen	ediphenyl diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; polymethylene polyphenyl isocyanate.
Signal word H-statements	Danger
H351	Suspected of causing cancer.
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, protective clothing 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.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.
Supplemental informat	ion
	- 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 Dire	ctive 67/548/EEC-1999/45/EC (DSD/DPD)
Labels	
×	
Harmful	
	ediphenyl diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; polymethylene polyphenyl isocyanate.
R-phrases	comprently ensortantice of the location contraction portantice, portantice portantice in socialitates
· · · · ·	ating to eyes, respiratory system and skin
	ited evidence of a carcinogenic effect
	y cause sensitisation by inhalation and skin contact
	mful: danger of serious damage to health by prolonged exposure through inhalation
S-phrases	
•	ep out of the reach of children)
. , .	not breathe vapour
	ar suitable protective clothing and gloves
	ase of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
	case of accident by inhalation: remove casualty to fresh air and keep at rest)
Additional recommend	
	s. See information supplied by the manufacturer.
	ns <mark>itised to diisocyanates may develop</mark> allergic reactions when using this product.
	rom asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
- This product shoul	d 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 <mark>used.</mark>
2.3 Other hazards:	
CLP	
No other hazards know	
NO OTHET HAZATUS KIIOWI	
DSD/DPD No other hazards know	

No other hazards known							
SECTION 3: Composit	ion/inforn	nation on i	ngred	ients			
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 Rema	ark
Reason for revision: 3.2					ublication date: 2003-01-30		
				D	ate of revision: 2015-03-11		
Revision number: 0302				Pi	roduct number: 38899		2 / 16

4,4'-methylenediphenyl diisocyanate	101-68-8	C<20 %	Carc. Cat. 3; R40	Carc. 2; H351	(1)(2)(8)(10)	Constituent
01-2119457014-47	202-966-0		Xn; R20 - 48/20	Acute Tox. 4; H332		
			Xi; R36/37/38	STOT RE 2; H373		
			R42/43	Eye Irrit. 2; H319		
				STOT SE 3; H335		
				Skin Irrit. 2; H315		
				Resp. Sens. 1; H334		
				Skin Sens. 1; H317		
o-(p-isocyanatobenzyl)phenyl is <mark>ocyanate</mark>	5873-54-1	<mark>C</mark> <20 %	Carc. Cat. 3; R40	Carc. 2; H351	(1)(2)(8)(10)	Constituent
01-2119480143-45	227-534-9		Xn; R20 - 48/20	Acute Tox. 4; H332		
			Xi; R36/37/38	STOT RE 2; H373		
			R42/43	Eye Irrit. 2; H319		
				STOT SE 3; H335		
				Skin Irrit. 2; H315		
				Resp. Sens. 1; H334		
				Skin Sens. 1; H317		
polymethylene polyphenyl isoc <mark>yanate</mark>	9016-87-9	C>50 %	Carc. Cat. 3; R40	Carc. 2; H351	(1)(2)(10)	Constituent
			Xn; R20 - 48/20	Acute Tox. 4; H332		
			Xi; R36/37/38	STOT RE 2; H373		
			R42/43	Eye Irrit. 2; H319		
				STOT SE 3; H335		
				Skin Irrit. 2; H315		
				Resp. Sens. 1; H334		
				Skin Sens. 1; H317		

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

(2) Substance with a Community workplace exposure limit

(8) Specific concentration limits, see heading 16

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

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. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

After eve 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. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Consult a doctor/medical service if you feel

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

4.2.1 Acute symptoms After inhalation:

Dry/sore throat. Coughing. Runny nose. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

After skin contact:

Tingling/irritation of the skin. After eye contact:

Irritation of the eye tissue. After ingestion:

Irritation of the gastric/intestinal mucosa.

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:

5.1.1 Suitable extinguishing media:

- Polyvalent foam. BC powder. Carbon dioxide. MAJOR FIRE: Water spray.
- 5.1.2 Unsuitable extinguishing media: No unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture:

Reason for revision: 3.2

Publication date: 2003-01-30 Date of revision: 2015-03-11

Revision number: 0302

Product number: 38899

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide). Reacts slowly with water (moisture): release of carbon dioxide.

5.3 Advice for firefighters:

- 5.3.1 Instructions:
 - 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 solid spill. Use appropriate containment to avoid environmental contamination. Prevent spreading in sewers.

6.3 Methods and material for containment and cleaning up:

Scoop solid spill into closing containers. Containers must not be sealed hermetically. Carefully collect the spill/leftovers. 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. 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 in a dry area. Keep container in a well-ventilated place. Keep only in the original container. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

- Heat sources, (strong) acids, (strong) bases, alcohols, amines, water/moisture.
- 7.2.3 Suitable packaging material:
 - Polyethylene.
- 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		
Difenylmethaan-4,4'-diis <mark>ocyanaat</mark>	Time-weighted average exposure limit 8 h (Private occupationa exposure limit value)	l 0.0048 ppm
	Time-weighted average exposure limit 8 h (Private occupationa exposure limit value)	l 0.05 mg/m ³
	Short time value (Private occupational exposure limit value)	0.02 ppm
	Short time value (Private occupational exposure limit value)	0.21 mg/m ³
Belgium 4,4'-Diisocyanate de diphénylméthane	(MDI) Time-weighted average exposure limit 8 h	0.005 ppm
	Time-weighted average exposure limit 8 h	0.052 mg/m ³
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r revision: 3.2	Publication date: 2003-01-30	
	Date of revision: 2015-03-11	
umber 0202	Product number: 20200	A /

Reaso

USA (TLV-ACGIH)					
Methylene bisphenyl iso	cyanate (N	1DI)	Time-weighted average	ge exposure limit 8 h (TLV - Adopt	ed Value) 0.005 ppm
					·
Germany					
4,4'-Methylendiphenyldi	isocyanat		Time-weighted average	ge exposure limit 8 h (TRGS 900)	0.05 mg/m
o-(p-Isocyanatobenzyl)pł		anat	Time-weighted average	0.05 mg/m	
pMDI (als MDI berechnet	t)		Time-weighted average	ge exposure limit 8 h (TRGS 900)	0.05 mg/m
France	<u> </u>				0.01
4,4'-Diisocyanate de diph	nenyimetha	ane	réglementaire indicat	ge exposure limit 8 h (VL: Valeur r ive)	non 0.01 ppm
				ge exposure limit 8 h (VL: Valeur r	non 0.1 mg/m ³
			réglementaire indicat	· ·	
				Valeur non réglementaire indicati	
			Short time value (VL: '	Valeur non réglementaire indicati	ive) 0.2 mg/m ³
UK Isocyanates, all (as -NCO)) Excont m	ethyl isocyanato	Time-woighted average	ge exposure limit 8 h (Workplace	exposure limit 0.02 mg/m
isocyanates, all (as -NCO)	, except m	ieuryi isocydiidte	(EH40/2005))	se exposure innit o n (workpiace	exposure innit 0.02 mg/m
				rkplace exposure limit (EH40/200	5)) 0.07 mg/m
b) National biological lim	it values				
		ailable these will be listed b	pelow.		
1.2 Sampling methods					
Product name			Test	Number	
4,4-Methylene Bisphenyl			NIOSH	5521	
4,4'-Methylenebis(pheny Isocyanates	/lisocyanat	e)	NIOSH NIOSH	5525 5521	
Isocyanates			NIOSH	5522	
Methylene Bisphenyl Iso	cyanate - (MDI)	OSHA	18	
Methylene Bisphenyl Iso	cyanate (N	1DI)	OSHA	47	
Methylene Bisphenyl Iso 1.3 Applicable limit values	cyanate		OSHA	33	
1.4 DNEL/PNEC values DNEL - Workers		ailable these will be listed b	below.		
DNEL - Workers 4,4'-methylenediphenyl o	diisocyanat	ie .	Jelow.	Value	Domost
DNEL - Workers 4,4'-methylenediphenyl o Effect level (DNEL/DM	diisocyanat	te Type		Value 0.05 mg/m ³	Remark
DNEL - Workers 4,4'-methylenediphenyl o	diisocyanat	ie .	nhalation	Value 0.05 mg/m ³ 0.1 mg/m ³	Remark
DNEL - Workers 4,4'-methylenediphenyl o Effect level (DNEL/DM	<u>diisocyanat</u> EL)	te Type Long-term local effects i Acute local effects inhala	nhalation	0.05 mg/m ³ 0.1 mg/m ³	
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DNEL - Workers 4,4'-methylenediphenyl o Effect level (DNEL/DM DNEL 0-(p-isocyanatobenzyl)ph Effect level (DNEL/DM	diisocyanat EL) nenyl isocya	te Type Long-term local effects i Acute local effects inhala anate Type Long-term systemic effects in	nhalation ation cts inhalation	0.05 mg/m ³ 0.1 mg/m ³ Value 0.05 mg/m ³ 0.1 mg/m ³	
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4,4'-methylenediphenyl diisocyanate		
Compartments	Value	Remark
Fresh water	1 mg/l	
Marine water	0.1 mg/l	
Aqua (intermittent rel <mark>eases)</mark>	10 mg/l	
STP	1 mg/l	
Soil	1 mg/kg soil dw	
o-(p-isocyanatobenzyl)phenyl isocyanate		
Compartments	Value	Remark
Fresh water	1 mg/l	
Marine water	0.1 mg/l	
Aqua (intermittent rel <mark>eases)</mark>	10 mg/l	
STP	1 mg/l	
Soil	1 mg/kg soil dw	
1.5 Control banding		

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:

Insufficient ventilation: wear respiratory protection.

b) Hand protection:

Gloves.

- materials (good resistance)

Polyethylene.

c) Eye protection:

Safety glasses. 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	Paste
Odour	Characteristic odour
Odour threshold	No data available
Colour	Colourless
Particle size	No data available
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	> 165°C
Evaporation rate	No data available
Relative vapour density	> 2
Vapour pressure	No data available
Solubility	water ; insoluble
Relative density	1.1
Decomposition temperatu	e 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
ther information:	
Absolute density	1146kg/m ³

SECTION 10: Stability and reactivity

Reason for revision: 3.2

9.

10.1 Reactivity:

- No data available.
- 10.2 Chemical stability: Stable under normal conditions.
- 10.3 Possibility of hazardous reactions: No data available.
- 10.4 Conditions to avoid: Keep away from naked flames/heat.

10.5 Incompatible materials:

(strong) acids, (strong) bases, alcohols, amines, water/moisture.

10.6 Hazardous decomposition products:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide). Reacts slowly with water (moisture): release of carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

Purocol Express

No (test)data on the mixture available

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	> 7616mg/kg		Rat (female)	Read-across	
Dermal	LD50	Equivalent to OECD 402	> 9400mg/kg bw	24 h	Rabbit (male/female)	Read-across	
Dermal	Percutaneo us absor <mark>ption</mark> rate	EPA OPPTS 870.7600	0.9%	8 h	Rat (male)	Experimental value	
Inhalation (aerosol)	LC50	OECD 403	<mark>> 2.24m</mark> g/l	1 h	Rat (male/female)	Experimental value	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	0.49mg/lair	4 h	Rat (male/female)	Read-across	

o-(p-isocyanatobenzyl)phenyl isocyanate

Route of exposure	Parametei	Method	Value	Exposure time		Value determination	Remark
Oral	LD50	Other	> 2000mg/kg bw		Rat (male/female)	Read-across	
Dermal	LD50	Equivalent to OECD 402	<mark>> 9400mg</mark> /kg bw	24 h	Rabbit (male/female)	Read-across	
Inhalation (aerosol)	LC50	OECD 403	<mark>387mg/m³</mark> air	4 h	Rat (male)	Experimental value	
Inhalation (aerosol)	LC50	OECD 403	<mark>645mg/m³</mark> air	4 h	Rat (female)	Experimental value	

polymethylene polyphenyl isocyanate

Route of exposure	Parameter	Method	Value	Exposure time		Value determination	Remark
Oral	LD50		<mark>> 10000</mark> mg/kg		Rat	Literature study	
Dermal	LD50		<mark>> 5000m</mark> g/kg		Rabbit	Literature study	
Inhalation (vapours)	LD50		<mark>10mg/l -</mark> 20mg/l	4 h	Rat	Literature study	
			category 2			Literature study	

Judgement is based on the relevant ingredients

 Conclusion

 Not classified for acute toxicity

 Corrosion/irritation

 Purocol Express

 No (test)data on the mixture available

 Reason for revision: 3.2

 Publication date: 2003-01-30 Date of revision: 2015-03-11

Route of exposure	nyl diisoc <mark>yanate</mark> Result	Method	Exposure time	Time point	Species	Value	Remark
			•••••			determination	
Eye	Slightly irritating				Rabbit	Experimental value	2
Eye	Irritating				Human	Weight of evidence	9
Skin	Irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	
Skin	Irritating				Human	Weight of evidence	2
Inhalation	Irritating				Human	Weight of evidence	2
(p-isocyanatobenzyl					_		_
Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Еуе	Irritating				Human	Weight of evidence	2
Eye	Not irritating	OECD 405	24 h	24; 48; 72 hours	Rabbit	Read-across	
Skin	Irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Read-across	
Skin	Irritating				Human	Weight of evidence	
Inhalation	Irritating				Human	Weight of evidence	
Route of exposure		Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritatin <mark>g; category</mark>	,				Literature study	
Skin	2 Irritating; category	,				Literature study	
Inhalation	2 Irritatin <mark>g; STOT SE</mark>					Literature study	
assification is based	cat.3	redients					
tory or skin sensitis	ation						
	vixturo availablo						
o (test)data on the n							
o (test)data on the n 4'-methylenediphen	iyl diisocy <mark>anate</mark>	/ethod	Exposure time	Observation time	Species	Value determination	Remark
o (test)data on the n 4'-methylenediphen	iyl diisocy <mark>anate</mark>	/lethod	Exposure time	Observation time	Species	Value determination	Remark
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Result Method Test substrate Effect Value determination Negative with metabolic activation, negative without metabolic activation OECD 471 Bacteria (S.typhimurium) No effect Experimental value attivation, negative without metabolic activation Experimental value Experimental value Experimental value attivation, negative without metabolic activation Motifield Exposure time Test substrate Organ Value determination A.4: methylenediphenyl disocyanate Method Exposure time Test substrate Organ Value determination 0:(p:isocyanatobenzyl)phenyl isocyanate Method Exposure time Test substrate Organ Value determination isogenicity OECD 474 3 weeks (1h/day, 1 day/week) Rat (male) Read-across stopperse Route of Parameter Method Exposure time Species Value Organ Effect exposure d d d determination determination determination _d d d _determination determination	Negative with activation, neg	gative v	withou	Equi		ECD 471									
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son for revision: 3.2 Publication date: 2003-01-30		LOAEC	2			6mg/m³ air	2	2 year(s) (6h/o	day, 5	Rat	Rea	d-across			Tumor forma
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	son for revision: 3.2	2													
ision number: 0302 Product number: 38899 9 /											_				9/

Route of Parame exposure	eter	Method	Value	Ехр	osure time	Species	Value determinatior	Organ	Effect
Unknown			category	2			Literature stud	y	
oductive toxicity									
<u>ocol Express</u> No (test)data on the mixt	ture avai	ilable							
4,4'-methylenediphenyl c	diisocyar	nate							
	Para	ameter	Nethod	Value	Exposure tir	me Species	Effect	Organ	Value determinatio
Developmental toxici	ty NOA	AEL O	DECD 414	3mg/m³ air	(6h/day)	Rat (fema			Experimenta value
	LOA	EL (DECD 414	9mg/m³ aiı	10 days (6h/day)	Rat (fema	e) Embryotoxi	city	Experimenta value
Maternal toxicity	NOA	AEL O	DECD 414	4mg/kg bw	/day10 day(s)	Rat (fema	e) No effect		Read-across
Effects on fertility									Data waiving
o-(p-isocyanatobenzyl)ph	nenyl iso	cyanate						•	
			Nethod	Value	Exposure tir	me Species	Effect	Organ	Value determinatio
Developmental toxici	ty NOA	AEL O	DECD 414	4mg/m³ air	10 days (6h/day)	Rat	No adverse systemic eff	ects	Read-across
Maternal toxicity	NOA	AEL O	DECD 414	4mg/m ³ air		Rat (fema			Read-across
					(6h/day)		systemic eff	ects	
ity other effects		evelopmenta	ity toxicity						
ity other effects ocol Express No (test)data on the mixt 4,4'-methylenediphenyl c	ture avai	evelopmenta ilable <u>nate</u>	toxicity	Organ	Effort	Eve	ocura tima	notion	Value
i ty other effects <u>ocol Express</u> No (test)data on the mixt 4,4'-methylenediphenyl c	ture avai	evelopmenta ilable	toxicity	Organ	Effect	Ехр	osure time Si	pecies	Value determinatior
ity other effects <u>occol Express</u> No (test)data on the mixt 4,4'-methylenediphenyl c Parameter Me LD50	ture avai diisocyar ethod	evelopmenta ilable <u>nate</u> Valu 100	toxicity le mg/kg bw	Organ	Effect	Exp		ouse (male)	Value determination Experimental v
LD50 hic effects from short and ocol Express ON CONTINUOUS/REPEA respiratory tract. Respirat TION 12: Ecolo 2.1 Toxicity:	ture avai diisocyar ethod d long-te tory diff	evelopmenta ilable <u>nate</u> 100 erm exposure POSURE/CON iculties.	toxicity ne ng/kg bw		t		M	ouse (male)	determination Experimental v
ity other effects <u>ocol Express</u> No (test)data on the mixt <u>4,4'-methylenediphenyl c</u> Parameter Me LD50 nic effects from short and <u>ocol Express</u> ON CONTINUOUS/REPEA respiratory tract. Respirat TION 12: Ecolo 2.1 Toxicity: <u>ocol Express</u> o (test)data on the mixtu	ture avai diisocyar ethod d long-te tory diff ogica re availa	evelopmenta ilable <u>nate</u> 100 erm exposure POSURE/CON iculties. Inform able	toxicity ne ng/kg bw		t		M	ouse (male)	determination Experimental v
ity other effects occol Express No (test)data on the mixt 4,4'-methylenediphenyl c Parameter Me LD50 nic effects from short and occol Express ON CONTINUOUS/REPEA respiratory tract. Respiratory TION 12: Ecolo	ture avai diisocyar ethod d long-te tory diff ogica re availa	evelopmenta ilable <u>nate</u> 100 erm exposure POSURE/CON iculties. Inform able	toxicity ne ng/kg bw		t		M	ouse (male)	determination Experimental v
ity other effects <u>ocol Express</u> No (test)data on the mixt <u>4,4'-methylenediphenyl c</u> Parameter Me LD50 nic effects from short and <u>ocol Express</u> ON CONTINUOUS/REPEA respiratory tract. Respirat TION 12: Ecolo 2.1 Toxicity: <u>ocol Express</u> o (test)data on the mixtu	ture avai diisocyar ethod d long-te tory diff ogica re availa	evelopmenta ilable <u>nate</u> 100 erm exposure POSURE/CON iculties. Inform able <u>nate</u>	toxicity le mg/kg bw TACT: Itching.	Skin rash/ini	lammation. Feeli	ing of weaknes	s. Coughing. Possib	ouse (male) le inflammatio	determination Experimental v
ity other effects	ture avai diisocyar ethod d long-te tory diff ogiCa re availa diisocyar	evelopmenta ilable <u>100</u> erm exposure POSURE/CON iculties. <u>1 inform</u> able <u>nate</u> Parameter LC50 EC50	toxicity le mg/kg bw TACT: Itching.	Skin rash/ini	Duration // 96 h 1 24 h	ing of weaknes	S. Coughing. Possib	ouse (male) le inflammatio	determination Experimental v n of the Value determina Read-across; Nominal
ity other effects occol Express No (test)data on the mixt 4,4'-methylenediphenyl of Parameter Me LD50	ture avai diisocyar ethod d long-te TED EXF tory diff ogica re availa diisocyar rates r aquati	evelopmenta ilable <u>100</u> erm exposure POSURE/CON iculties. <u>1 inform</u> able <u>nate</u> Parameter LC50 EC50	toxicity le mg/kg bw TACT: Itching. ation Method OECD 203	Skin rash/ini	Duration // 96 h 1 24 h	ing of weaknes Species Danio rerio	S. Coughing. Possik	ouse (male) le inflammatio Fresh/salt water n Fresh water	determination Experimental v n of the Read-across; Nominal concentration Read-across;

Reason for revision: 3.2

EC50

OECD 209

<mark>> 100</mark>mg/l

3 h

Publication date: 2003-01-30 Date of revision: 2015-03-11

system

Static system Fresh water

Activated sludge

invertebrates Toxicity aquatic micro-

organisms

Reproduction

Read-across;

Nominal concentration

	Parameter	Method	Value		Duration	Species	Test d	esign	Fresh/salt water	Value determ
Acute toxicity fishes	LC50	OECD 203	<mark>> 100</mark> 0m	g/I	96 h	Brachydanio	Static	system	Fresh water	Read-across;
						rerio	-			Nominal concentration
Acute toxicity invertebrates	EC50	OECD 202	> 1000m	g/I	24 h	Daphnia magna	Static	system	Fresh water	Read-across; Nominal concentration
Toxicity algae and other aquati	c EC50	OECD 201	<mark>> 164</mark> 0m	g/I	72 h	Scenedesmus subspicatus	Static	system	Fresh water	Read-across; (
Long-term toxicity aquatic invertebrates	NOEC	OECD 211	≥ 10mg/l		21 day(s)	Daphnia magna	Semi-s systen		Fresh water	Read-across; Nominal concentration
Toxicity aquatic micro- organisms	EC50	OECD 209	> 100mg	/I	3 h	Activated sludge	e Static	system	Fresh water	Read-across;
	Parameter	Method		Val	ue	Duration	-	Specie	S	Value determ
Toxicity soil macro-organisms	NOEC	OECD 207				dw 14 day(s)		Eisenia	ı fetida	Read-across
Toxicity terrestrial plants	NOEC	Equivalen 208				dw 14 day(s)		Avena		Read-across
	NOEC	Equivalen 208	t to OECD	≥1	000mg/kg soil	dw 14 day(s)		Lactuc	a sativa	Read-across
olymethylene polyphenyl iso <mark>cya</mark>	anate Parameter	Method	Value		Duration	Species	Test d	esign	Fresh/salt water	Value determ
Acute toxicity other aquatic organisms	LC50		<mark>> 100</mark> 0m	g/I	96 h				water	Literature stu
Toxicity aquatic micro- organisms	EC50	OECD 209	> 100mg	/I		Activated sludge	2			Literature stue
.2 Persistence and degra 4'-methylenediphenyl diisocya Biodegradation water	-	Value				No 1272/2008		Val	lue determin:	ation
4'-methylenediphenyl diisocyan Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II)	nate radability:	Value 0%			Durat 28 day	ion		-	l <mark>ue determina</mark> ad-across	ation
4'-methylenediphenyl diisocyal Biodegradation water Method OECD 302C: Inherent Biodeg Modified MITI Test (II) Phototransformation air (DT50	nate radability:	0%		_	Durat 28 day	ion y(s)		Rea	ad-across	
4'-methylenediphenyl diisocyan Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II)	nate radability:	0% Value			Durat 28 day	ion		Rea	ad-across lue determina	
4'-methylenediphenyl diisocyal Biodegradation water Method OECD 302C: Inherent Biodeg Modified MITI Test (II) Phototransformation air (DT50 Method	nate radability:	0%			Durat 28 day Conc.	ion y(s) OH-radicals ry	ation	Rea Val	ad-across lue determina	ation
4'-methylenediphenyl diisocyal Biodegradation water Method OECD 302C: Inherent Biodeg Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water)	nate radability:	0% Value 0.92day(s)			Durat 28 day Conc.	ion y(s) OH-radicals	ation	Rea Val QS	ad-across lue determina AR	ation
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4'-methylenediphenyl diisocya Biodegradation water Method OECD 302C: Inherent Biodeg Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method	nate radability: D air)	0% Value 0.92day(s) Value			Durat 28 day Conc.	ion y(s) OH-radicals ry dation/mineralis	ation	Val QS Val	ad-across lue determina AR lue determina	ation
4'-methylenediphenyl diisocyai Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method -(p-isocyanatobenzyl)phenyl iso Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II)	nate radability: D air) D air)	0% Value 0.92day(s) Value 20h			Durat 28 day Conc. Prima degra	ion y(s) OH-radicals ry dation/mineralis	ation	Rea Val QSJ Rea Val	ad-across lue determina AR lue determina ad-across	ation
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4'-methylenediphenyl diisocyai Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water)	nate radability: D air) D air)	0% Value 0.92day(s) Value 20h Value 0% Value 0% Value 0%			Durat 28 day Conc. Prima degra Durat 28 day Conc. 1.5E6	ion y(s) OH-radicals ry dation/mineralis ion y(s) OH-radicals /cm ³		Val QS Val Rea Val Rea Val	ad-across lue determina AR lue determina ad-across lue determina ad-across lue determina berimental va	ation ation ation ation ation ue
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4'-methylenediphenyl diisocyai Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method	nate radability: D air) D air) D air) radability: D air)	0% Value 0.92day(s) Value 20h Value 0%			Durat 28 day Conc. Prima degra Durat 28 day Conc. 1.5E6	ion y(s) OH-radicals ry dation/mineralis ion y(s) OH-radicals /cm ³ ry dation/mineralis		Val QS Val Rea Val Rea Val Exp Val Exp	ad-across lue determina AR lue determina ad-across lue determina ad-across lue determina perimental va lue determina	ation ation ation ation ue ation
4'-methylenediphenyl diisocyai Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method AOPWIN v1.92 Half-life water (t1/2 water) Method	nate radability: Dair) Dair) Dair) radability: Dair)	0% Value 0.92day(s) Value 20h Value 0% Value 0.89day(s); Gl Value 20h; GLP			Durat 28 day Conc. Prima degra Durat 28 day 28 day Conc. 1.5E6	ion y(s) OH-radicals ry dation/mineralis ion y(s) OH-radicals /cm ³ ry dation/mineralis		Val QS Val Rea Val Rea Val Rea Val Rea Val	ad-across lue determina AR lue determina ad-across lue determina ad-across lue determina berimental va lue determina ad-across	ation ation ation ation ation ation ation ation ation
A'-methylenediphenyl diisocyal Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II)	nate radability: Dair) Dair) poyanate radability: Dair) anate radability:	0% Value 0.92day(s) Value 20h Value 0% Value 089day(s); GI Value 20h; GLP Value 60%			Durat 28 day Conc. Prima degra Durat 28 day 28 day Conc. 1.5E6	ion y(s) OH-radicals ry dation/mineralis ion y(s) OH-radicals /cm ³ ry dation/mineralis		Val QS Val Rea Val Rea Val Rea Val Rea Val	ad-across lue determina AR lue determina ad-across lue determina ad-across lue determina ad-across lue determina	ation ation ation ation ation ation ation ation ation
4'-methylenediphenyl diisocyai Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method AOPWIN v1.92 Half-life water (t1/2 water) Method AOPWIN v1.92 Half-life water (t1/2 water) Method AOPWIN v1.92 Half-life water (t1/2 water) Method DIVMethylene polyphenyl isocya Biodegradation water Method OECD 302C: Inherent Biodegr Modified MITI Test (II) Phototransformation air (DT50 Method	nate radability: Dair) Dair) poyanate radability: Dair) anate radability:	0% Value 0.92day(s) Value 20h Value 0% Value 089day(s); GI Value 20h; GLP Value 60%			Durat 28 day Conc. Prima degra Durat 28 day 28 day Conc. 1.5E6	ion y(s) OH-radicals ry dation/mineralis ion y(s) OH-radicals /cm ³ ry dation/mineralis		Val QS Val Rea Val Rea Val Rea Val Rea Val	ad-across lue determina AR lue determina ad-across lue determina ad-across lue determina ad-across lue determina	ation ation ation ation ation ation ation ation ation

g Kow					
Viethod		e <mark>mark</mark> lot applicable (mixt	Value	Temperature	Value determination
1,4'-methylenediph					
BCF fishes		<u>indee</u>			
Parameter	Method	Value	Duration	Species	Value determination
BCF	OECD 30			Cyprinus carpio	Experimental value
Log Kow		I			
Method		Remark	Value	Temperature	Value determination
			5.22		Estimated value
OECD 117			4.51	22 °C	Experimental value
o-(p-isocyanatoben	izyl)phenyl iso	<u>ocyanate</u>			
BCF fishes	N deaths and	Malua	Dunation	E mosion	
Parameter BCF	Method OECD 30		Duration	Species	Value determination Read-across
	UECD 30	92 - 200) 28 day(s)	Cyprinus carpio	Read-across
Log Kow Method		Remark	Value	Temperature	Value determination
OECD 117		Keillaik	4.51	22 °C	Conclusion by analogy
polymethylene poly	vphenyl isocy	anate	T.J1	42 0	conclusion by analogy
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	e		
o <mark>nclusion</mark> Contains bioaccumu					
Volatility (Henry's	s Law consta	nt LI)			
Value		Method	Temperature	Remark	Value determination
8.95E-7atm m³/ onclusion No straightforward	/mol conclusion c	Method an be drawn based	25°C		Value determination Estimated value
8.95E-7atm m ³ / onclusion No straightforward 2.5 Results of P Does not contain cc 2.6 Other adver ocol Express lobal warming pote one of the known cc zone-depleting pot ot classified as dang 4.4'-methylenediph Global warming p Not included in th <u>o-(p-isocyanatoben</u> Global warming p Not included in th	(mol conclusion c PBT and vP omponent(s) rse effects ential (GWP) gerous for the menyl diisocya pootential (GV ne list of fluor isyl)phenyl iso potential (GV ne list of fluor	Method An be drawn based VB assessment that meet(s) the cri is included in the list e ozone layer (Regu inate vP) inated greenhouse <u>ocyanate</u> VP) inated greenhouse	25°C upon the available numeri : iteria of PBT and/or vPvB a	cal values s listed in Annex XIII of Regulation (f e gases (Regulation (EC) No 517/201 517/2014)	EStimated value
8.95E-7atm m ³ / onclusion No straightforward 2.5 Results of P Does not contain cc 2.6 Other adver occl Express lobal warming pote one of the known cr zone-depleting pot ot classified as dang 4.4'-methylenediph Global warming p Not included in th <u>o-(p-isocyanatoben</u> Global warming p Not included in th <u>polymethylene poly</u> Not included in th	/mol conclusion c PBT and vP component(s) rse effects ential (GWP) omponents is tential (GWP) gerous for the menyl diisocy potential (GV ne list of fluor yphenyl isocy potential (GV ne list of fluor potential (GV ne list of fluor	Method An be drawn based VB assessment that meet(s) the cri is included in the list e ozone layer (Regu inate vP) inated greenhouse <u>anate</u> VP) inated greenhouse <u>anate</u> VP) inated greenhouse	25°C upon the available numeri : iteria of PBT and/or vPvB a t of fluorinated greenhouse ulation (EC) No 1005/2009) gases (Regulation (EC) No gases (Regulation (EC) No	cal values s listed in Annex XIII of Regulation (f e gases (Regulation (EC) No 517/201 517/2014)	EStimated value
8.95E-7atm m ³ / onclusion No straightforward 2.5 Results of P Does not contain cc 2.6 Other adver ocol Express lobal warming pote one of the known cc zone-depleting pot ot classified as dang 4.4'-methylenediph Global warming p Not included in th <u>polymethylene poly</u> Global warming p Not included in th <u>polymethylene poly</u> Global warming p Not included in th <u>polymethylene poly</u> Not included in th	(mol conclusion c PBT and vP pomponent(s) rse effects ential (GWP) oomponents is tential (GWP) gerous for the menyl diisocya potential (GV ne list of fluor szyl)phenyl iso potential (GV ne list of fluor syphenyl isocy potential (GV ne list of fluor spotential (GV ne list of fluor spotential (GV ne list of fluor spotential (GV ne list of fluor	Method An be drawn based VB assessment that meet(s) the cri is included in the list e ozone layer (Regu inated greenhouse Considerati a general descriptio	25°C upon the available numeri : iteria of PBT and/or vPvB a t of fluorinated greenhouse ulation (EC) No 1005/2009) : gases (Regulation (EC) No : gases (Regulation (EC) No	cal values s listed in Annex XIII of Regulation (f e gases (Regulation (EC) No 517/201 517/2014) 517/2014)	EStimated value
8.95E-7atm m ³ / onclusion No straightforward 2.5 Results of P Does not contain cc 2.6 Other adver ocol Express lobal warming pote one of the known cc zone-depleting pot ot classified as dang 4.4'-methylenediph Global warming p Not included in th <u>o-(p-isocyanatoben</u> Global warming p Not included in th <u>polymethylene poly</u> Global warming p Not included in th <u>polymethylene poly</u> Global warming p Not included in th <u>polymethylene poly</u> Global warming p Not included in th	mol conclusion c PT and vP pomponent(s) rse effects ential (GWP) components is tential (GWP) gerous for the menyl diisocy potential (GV ne list of fluor vphenyl isocy potential (GV ne list of fluor isocy potential (GV ne list of fluor potential (GV potential (GV potentia	Method An be drawn based VB assessment that meet(s) the cri is included in the list e ozone layer (Regu inated greenhouse ocyanate VP) inated greenhouse anate VP) inated greenhouse CONSIDERATI a general descriptio identified use.	25°C upon the available numeri : iteria of PBT and/or vPvB a t of fluorinated greenhouse ulation (EC) No 1005/2009) : gases (Regulation (EC) No : gases (Regulation (EC) No	cal values s listed in Annex XIII of Regulation (f e gases (Regulation (EC) No 517/201 517/2014) 517/2014)	EC) No 1907/2006. .(4)

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Product number: 38899

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

Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber 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).

SECTION 14: Transport information

Road (ADR) 14.1 UN number:		
Transport	Not subject	
14.2 UN proper shipping name:	Introduçõe	
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	nark no	
14.6 Special precautions for user:		
Special provisions		
Limited quantities		
Rail (RID) 14.1 UN number:		
Transport	Not subject	
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	nark no	
14.6 Special precautions for user:		
Special provisions		
Limited quantities		
Inland waterways (ADN)		
14.1 UN number:		
	here are a	
Transport	Not subject	
14.2 UN proper shipping name: 14.3 Transport hazard class(es):		
Class		
Classification code		
14.4 Packing group:		
Packing group		
Labels		
14.5 Environmental hazards:		
Environmentally hazardous substance	no	
14.6 Special precautions for user:		
Special provisions		
Limited quantities		
Sea (IMDG/IMSBC)		
14.1 UN number:		
Transport	Not subject	
Reason for revision: 3.2	Publication date: 2003-01-30	
	Date of revision: 2015-03-11	
Revision number: 0302	Product number: 38899 1:	2/16
	Product number: 38839 1.	3/16

14.2 UN proper shipping name:	
14.3 Transport hazard class(es):	
Class	
14.4 Packing group:	
Packing group	
Labels	
14.5 Environmental hazards:	
Marine pollutant	-
Environmentally hazardo <mark>us substance mark</mark>	no
14.6 Special precautions for user:	
Special provisions	
Limited quantities	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and	the IBC Code:
Annex II of MARPOL 73/7 <mark>8</mark>	
Air (ICAO-TI/IATA-DGR)	
14.1 UN number:	
Transport	Not subject
14.2 UN proper shipping name:	
14.3 Transport hazard class(es):	
Class	
14.4 Packing group:	
Packing group	
Labels	
14.5 Environmental hazards:	
Environmentally hazardo <mark>us substance mark</mark>	no
14.6 Special precautions for user:	
Special provisions	
Passenger and cargo tra <mark>nsport: limited quantities: maximum n</mark> e	et quantity
per packaging	

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
0%	
0g/l	

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.

 (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 required for fiscal reasons, or perfume, or both, if they: (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1. (e) hazard class 5.1. (f) hazard class 5.1. (h) hazard class 5.1. (h			Designation of the substance, of t	he group of	Conditions of restriction
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 refers and the time of the set o			substances or of the mixture		
	. р	olymethylene polyphenyl isocyanal	regarded as dangerous in accorda Directive 1999/45/EC or are fulfill criteria for any of the following ha or categories set out in Annex I to (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 a types A and B, 2.9, 2.10, 2.12, 2.1 and 2, 2.14 categories 1 and 2, 2.: F; (b) hazard classes 3.1 to 3.6, 3.7 a effects on sexual function and fer development, 3.8 effects other th effects, 3.9 and 3.10; (c) hazard class 4.1;	ince with ing the azard classes Regulation nd 2.7, 2.8 3 categories 1 15 types A to dverse tility or on	 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 labelled 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 labelled with R65 or H304, intended for supply to the general public are labellowed on the threatening lung damage"; b) grill lighter fluids, labelled wit
	Reaso	on for revision: 3.2			

• 4,4'-methylenediphenyl diisocyanate Methylenediphenyl diisocyanate (MDI) 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtu • 0-(p-isocyanatobenzyl)phenyl isocyanate Methylenediphenyl diisocyanate (MDI) 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtu • 0-(p-isocyanatobenzyl)phenyl isocyanate Methylenediphenyl diisocyanate; 2,4'- 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtu • 0-(p-isocyanatobenzyl)phenyl isocyanate Methylenediphenyl diisocyanate; 2,4'- 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtu • 0-(p-isocyanatobenzyl)phenyl isocyanate Methylenediphenyl diisocyanate; 2,4'- 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtu • 0-(p-isocyanatobenzyl)phenyl isocyanate (Mothylenediphenyl diisocyanate; 2,4'- 1. Shall not be placed on the market that the packagii • 0-(p-isocyanatobenzyl)phenyl isocyanate (a) contains protective gloves which comply with the requirements of Council Directive • 0-(p-isocyanatobenzyl)phenyl diisocyanate; 2,2'- (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other	
 4,4'-methylenediphenyl diisocyanate o-(p-isocyanatobenzyl)phenyl isocyanate Methylenediphenyl diisocyanate Methylenediphenyl diisocyanate; 4,4'-methylenediphenyl isocyanate Shall not be placed on the market after 27 December 2010, as a constituent of mixture on greater than 0,1 % by weight of MDI for supply to the generation supply to the generation of the market that the packagin (a) contains protective gloves which comply with the requirements of Council Directive (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other 	ipie
Community legislation concerning the classification, packaging and labelling of substar and mixtures: "— Persons already sensitised to diisocyanates may develop allergic reactions when us this product. — Persons suffering from asthma, eczema or skin problems should avoid contact, inclu dermal contact, with this product. — This product should not be used under conditions of poor ventilation unless a prote mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is use By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives.	ral ng: e nces sing uding ctive
 polymethylene polyphenyl isocyanate Methylenediphenyl diisocyanate (MDI) including the following specific isomers: 4,4'- Methylenediphenyl diisocyanate; 2,4'- Methylenediphenyl diisocyanate; 2,2'- Methylenediphenyl diisocyanate Shall not be placed on the market after 27 December 2010, as a constituent of mixtu concentrations equal to or greater than 0,1 % by weight of MDI for supply to the gene public, unless suppliers shall ensure before the placing on the market that the packagin (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 substar and mixtures: " — Persons already sensitised to diisocyanates should avoid contact, includer dermal contact, with this product. — This product should not be used under conditions of poor ventilation unless a prote mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is use By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives. 	ral ng: e nces sing uding ctive
National legislation The Netherlands	
Purocol Express	
Waste identification (the LWCA (the Netherlands): KGA category 03 Netherlands)	
Waterbezwaarlijkheid 11	
National legislation Germany	
Purocol Express	
WGK 1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährde Stoffe (VwVwS) of 27 July 2005 (Anhang 4)	nder
4,4'-methylenediphenyl diisocyanate	
MAK - Krebserzeugend 4	
Kategorie	
Schwangerschaft Gruppe C	
MAK 8-Stunden-Mittelwert Diphenylmethan-4,4'-diisocyanat (MDI) (einatembare Fraktion); 0.05 mg/m ³ ; gemessen als einatembare Fraktion (vg mg/m ³ Abschn. Vd) S. 191)	Ι.
TA-Luft 5.2.5; I	
5.2.5	
o-(p-isocyanatobenzyl)phenyl isocyanate	
TA-Luft 5.2.5; I 5.2.	
5.2.5	
polymethylene polyphenyl isocyanate	
TRGS905 - Krebserzeug <mark>end 3</mark>	
TPCS005 Erbeutvoränderne	
TRGS905 - Erbgutverän <mark>dernd -</mark>	
TRG\$905	
TRGS905 - Fruchtbarkeitsgefährde <mark>nd</mark>	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie -	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - Schwangerschaft Gruppe C	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - Schwangerschaft Gruppe C MAK 8-Stunden-Mittelwert "polymeres MDI" (einatembare Fraktion); 0.05 mg/m³; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191)	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - 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)	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - 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 -	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - 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 - Purocol Express -	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - 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 -	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - Schwangerschaft Gruppe C MAK 8-Stunden-Mittelwert "polymeres MDI" (einatembare Fraktion); 0.05 mg/m³; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191) National legislation France - Purocol Express -	
TRGS905 - - Fruchtbarkeitsgefährdend - TRGS905 - Fruchtschädigend - MAK - Krebserzeugend 4 Kategorie - Schwangerschaft Gruppe C MAK 8-Stunden-Mittelwert "polymeres MDI" (einatembare Fraktion); 0.05 mg/m³; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191) Mational legislation France - Purocol Express No data available	
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	Pur	ocol Exp	ress	
4,4'-methylenediphenyl	diisocvanate			
Catégorie cancérogène				
National legislation Belgium				
Purocol Express				
No data available				
Other relevant data				
Purocol Express				
No data available				
4,4'-methylenediphenyl o	diisocvanate			
IARC - classification		liisocyanate and polyr	neric 4,4'-methylenediphenyl diisocyana	te
polymethylene polyphen				
IARC - classification	3; Polymethylene polyphen	yl isocyanate		
15.2 Chemical safety asse	essment:			
No chemical safety asses	sment is required.			
CTION 1C. Other in	formation			
CTION 16: Other in				
	ferred to under headings 2 and 3:			
R20 Harmful by inhalation R36/37/38 Irritating to a	eyes, respiratory system and skin			
R40 Limited evidence of				
	itisation by inhalation and skin conta			
	r of serious damage to health by pro	e .	ugh inhalation	
H315 Causes skin irritati	s referred to under headings 2 and	3:		
H317 May cause an alle				
H319 Causes serious eye	-			
H332 Harmful if inhaled				
	or asthma symptoms or breathing of	lifficulties if inhaled.		
H335 May cause respira H351 Suspected of caus	-			
	e to organs through prolonged or re	peated exposure if in	haled.	
(*) = INTERNAL CLASSIFIC				
PBT-substances = nersist				
	ent, bioaccumulative and toxic subs	ances		
DSD Dangerou	us Substance Directive	ances		
DSD Dangerou DPD Dangerou	us Substance Directive us Preparation Directive		n in Europe)	
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica	us Substance Directive us Preparation Directive htion, labelling and packaging (Globa		n in Europe)	
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits	us Substance Directive us Preparation Directive ation, labelling and packaging (Globa s CLP	lly Harmonised Syster		
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica	us Substance Directive us Preparation Directive ation, labelling and packaging (Globa s CLP	Ily Harmonised Syster C ≥ 5 %	Eye Irrit. 2; H319	CLP Annex VI (ATP 1)
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits	us Substance Directive us Preparation Directive ation, labelling and packaging (Globa s CLP	Ily Harmonised Syster $C \ge 5 \%$ $C \ge 5 \%$	Eye Irrit. 2; H319 Skin Irrit. 2; H315	CLP Annex VI (ATP 1)
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits	us Substance Directive us Preparation Directive ation, labelling and packaging (Globa s CLP	Ily Harmonised Syster $C \ge 5 \%$ $C \ge 5 \%$ $C \ge 0.1 \%$	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334	CLP Annex VI (ATP 1) CLP Annex VI (ATP 1)
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits 4,4'-methylenediphenyl o	us Substance Directive us Preparation Directive htion, labelling and packaging (Globa s CLP diisocyanate		Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334 STOT SE 3; H335	CLP Annex VI (ATP 1) CLP Annex VI (ATP 1) CLP Annex VI (ATP 1)
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits	us Substance Directive us Preparation Directive htion, labelling and packaging (Globa s CLP diisocyanate	Ily Harmonised Syster $C \ge 5 \%$ $C \ge 5 \%$ $C \ge 0.1 \%$	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334	CLP Annex VI (ATP 1) CLP Annex VI (ATP 1)
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits 4,4'-methylenediphenyl o	us Substance Directive us Preparation Directive htion, labelling and packaging (Globa s CLP diisocyanate		Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334 STOT SE 3; H335 Eye Irrit. 2; H319	CLP Annex VI (ATP 1) CLP Annex VI (ATP 1) CLP Annex VI (ATP 1) CLP Annex VI (ATP 1)
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits 4,4'-methylenediphenyl o	us Substance Directive us Preparation Directive htion, labelling and packaging (Globa s CLP diisocyanate	Ily Harmonised System C ≥ 5 % C C ≥ 5 % C C ≥ 5 % C C ≥ 5 % C C ≥ 5 % C C ≥ 5 % C	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334 STOT SE 3; H335 Eye Irrit. 2; H319 Skin Irrit. 2; H315	CLP Annex VI (ATP 1) CLP Annex VI (ATP 1) CLP Annex VI (ATP 1) CLP Annex VI (ATP 1) CLP Annex VI (ATP 1)
DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits 4,4'-methylenediphenyl o	us Substance Directive us Preparation Directive ition, labelling and packaging (Globa is CLP diisocyanate nenyl isocyanate	IvHarmonised SystemC ≥ 5 %C ≥ 0.1 %	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334 STOT SE 3; H335 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334	CLP Annex VI (ATP 1) CLP Annex VI (ATP 1)
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DSD Dangerou DPD Dangerou CLP (EU-GHS) Classifica Specific concentration limits 4,4'-methylenediphenyl o o-(p-isocyanatobenzyl)ph Specific concentration limits	us Substance Directive us Preparation Directive ition, labelling and packaging (Globa is CLP diisocyanate nenyl isocyanate is DSD diisocyanate	IlyHarmonised System $C ≥ 5 %$ $C ≥ 0.1 %$ $C ≥ 5 %$	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334 STOT SE 3; H335 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Resp. Sens. 1; H334 STOT SE 3; H335 Xi; R36/37/38 R42 Xi; R36/37/38	CLP Annex VI (ATP 1) CLP Annex VI (ATP 1) DSD Annex VI (ATP 1) DSD Annex VI (ATP 1)
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