SDS No. : 75920
V011.0

POLYURETHANE SEALANT (BLA)

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Replaces version from: 23.04.2015

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

1.1. Product identifier
865242 POLYURETHANE SEALANT (BLA)

Contains:
4,4'- methylenediphenyl diisocyanate
p-Toluenesulphonyl isocyanate

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
1-component-polyurethane adhesive

1.3. Details of the supplier of the safety data sheet

Quest Consumables Ltd
Stock House ,Seymour Road
Nuneaton, Warwickshire
CV11 4LB

Phone: +44 2476322126
Fax-no.: +44 2476322117

sales@questconsumables.com

1.4. Emergency telephone number
24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):
Not flammable according burning rate test N.1 UN Manual of Tests and Criteria
Respiratory sensitizer Category 1
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:

Signal word: Danger

Hazard statement:	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Supplemental information	Contains Hexane, 1,6-diisocyanato-, homopolymer, V=7000-11000 mPas/23; Dibutyltin dilaurate. May produce an allergic reaction.
Precautionary statement: Prevention	P261 Avoid breathing dust.
Precautionary statement: Response	P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

2.3. Other hazards
Persons suffering from allergic reactions to isocyanates should avoid contact with the product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:
1-Component PU adhesive
Base substances of preparation:
Polyurethane prepolymer with free 4,4'-methylenediphenyl diisocyanate (MDI)

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Isoparaffinic Hydrocarbon 90622-57-4	292-459-0 01-2119472146-39	5- < 10 %	Flam. Liq. 3 H226 Asp. Tox. 1; Oral H304
Xylene - mixture of isomeres 1330-20-7	215-535-7 01-2119488216-32	1- < 5 %	Asp. Tox. 1 H304 Acute Tox. 4; Inhalation H332 Acute Tox. 4; Dermal H312 Skin Irrit. 2 H315 Flam. Liq. 3 H226 Eye Irrit. 2 H319 STOT SE 3 H335 STOT RE 2 H373
Ethylbenzene 100-41-4	202-849-4 01-2119489370-35	1- < 3 %	Flam. Liq. 2 H225 Acute Tox. 4 H332 Asp. Tox. 1 H304 STOT RE 2 H373 Aquatic Chronic 3 H412
4,4'- methylenediphenyl diisocyanate 101-68-8	202-966-0 01-2119457014-47	0,1- < 1 %	Carc. 2 H351 Acute Tox. 4; Inhalation 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
Hexane, 1,6-diisocyanato-, homopolymer, V=7000-11000 mPas/23 28182-81-2	500-060-2	0,1- < 1 %	Skin Sens. 1 H317
p-Toluenesulphonyl isocyanate 4083-64-1	223-810-8 01-2119980050-47	0,1- < 0,25 %	Eye Irrit. 2 H319 STOT SE 3 H335 Skin Irrit. 2 H315 Resp. Sens. 1 H334
Dibutyltin dilaurate 77-58-7	201-039-8 01-2119496068-27	0,1- < 0,25 %	Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Skin Corr. 1C H314 Skin Sens. 1 H317 Muta. 2 H341 Repr. 1B H360 STOT SE 1

			H370 STOT RE 1; Oral H372 Acute Tox. 4 H302

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Fresh air, oxygen supply, warmth; seek specialist medical attention.
Delayed effects possible after inhalation.

Skin contact:
Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
May cause sensitization by inhalation.

An allergic reaction cannot be excluded after repeated skin contact.

4.3. Indication of any immediate medical attention and special treatment needed
See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
All common extinguishing agents are suitable.

Extinguishing media which must not be used for safety reasons:
Water jet (solvent-containing product).

5.2. Special hazards arising from the substance or mixture
In case of fire toxic gases can be released.

5.3. Advice for firefighters
Wear protective equipment.
Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear protective equipment.
Avoid contact with skin and eyes.
Keep unprotected persons away.

6.2. Environmental precautions
Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up
Remove mechanically.
Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections
See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures:
Do not eat, drink or smoke while working.
Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities
Ensure good ventilation/extraction.
Store in a dry place.
Container must be made airtight after use.
Storage at 15 to 25°C is recommended.

7.3. Specific end use(s)
1-component-polyurethane adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Di-"isononyl" phthalate 28553-12-0 [DIISONONYL PHTHALATE]		5	Time Weighted Average (TWA):		EH40 WEL
Xylene 1330-20-7 [XYLENE, O-, M-, P- OR MIXED ISOMERS]	50	220	Time Weighted Average (TWA):		EH40 WEL
Xylene 1330-20-7 [XYLENE, O-, M-, P- OR MIXED ISOMERS]	100	441	Short Term Exposure Limit (STEL):		EH40 WEL
Xylene 1330-20-7 [XYLENE, O-, M-, P- OR MIXED ISOMERS]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	50	221	Time Weighted Average (TWA):	Indicative	ECTLV
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	100	442	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]			Skin designation:	Can be absorbed through the skin.	ECTLV
Ethylbenzene 100-41-4 [ETHYLBENZENE]	125	552	Short Term Exposure Limit (STEL):		EH40 WEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL

Ethylbenzene 100-41-4 [ETHYLBENZENE]	100	441	Time Weighted Average (TWA):		EH40 WEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]	100	442	Time Weighted Average (TWA):	Indicative	ECTLV
Ethylbenzene 100-41-4 [ETHYLBENZENE]	200	884	Short Term Exposure Limit (STEL):	Indicative	ECTLV
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):		EH40 WEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL
Dibutyltin dilaurate 77-58-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,1	Time Weighted Average (TWA):		EH40 WEL
Dibutyltin dilaurate 77-58-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]		0,2	Short Term Exposure Limit (STEL):		EH40 WEL
Dibutyltin dilaurate 77-58-7 [TIN COMPOUNDS, ORGANIC, EXCEPT CYHEXATIN (ISO), (AS SN)]			Skin designation:	Can be absorbed through the skin.	EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m^3	Value type	Short term exposure limit category / Remarks	Regulatory list
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE (PVC), RESPIRABLE DUST]		1	Time Weighted Average (TWA):		IR_OEL
Polyvinyl chloride 9002-86-2 [POLYVINYL CHLORIDE (PVC), TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Di-"isononyl" phthalate 28553-12-0 [DIISONONYL PHTHALATE]		5	Time Weighted Average (TWA):		IR_OEL
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS]	50	221	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS]	100	442	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	50	221	Time Weighted Average (TWA):	Indicative	ECTLV
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	100	442	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5		2,4	Time Weighted Average (TWA):		IR_OEL

[SILICA, AMORPHOUS, RESPIRABLE DUST]					
Ethylbenzene 100-41-4 [ETHYLBENZENE]			Skin designation:	Can be absorbed through the skin.	ECTLV
Ethylbenzene 100-41-4 [ETHYLBENZENE]	100	442	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]	200	884	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]	100	442	Time Weighted Average (TWA):	Indicative	ECTLV
Ethylbenzene 100-41-4 [ETHYLBENZENE]	200	884	Short Term Exposure Limit (STEL):	Indicative	ECTLV
4,4'-Methylenediphenyl diisocyanate 101-68-8 [4,4'-METHYLENE-DIPHENYL DIISOCYANATE (AS -NCO)]		0,02	Time Weighted Average (TWA):		IR_OEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [4,4'-METHYLENE-DIPHENYL DIISOCYANATE (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):		IR_OEL
Dibutyltin dilaurate 77-58-7 [TIN ORGANIC COMPOUNDS, (AS SN)]		0,2	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Dibutyltin dilaurate 77-58-7 [TIN ORGANIC COMPOUNDS, (AS SN)]		0,1	Time Weighted Average (TWA):	Indicative OELV	IR_OEL

Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Xylene 1330-20-7 [XYLENE O-, M-, P-, OR MIXED ISOMERS]	Methylhippuric acids	Creatinine in urine	Sampling time: End of shift.		UKEH40BMGV		

8.2. Exposure controls:

Engineering controls:
Use only in well ventilated areas.

Respiratory protection:
In case of dust formation, we recommend wearing of appropriate respiratory protection equipment with particle filter P (EN 14387).
This recommendation should be matched to local conditions.

Hand protection:
Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; >= 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; >= 0.7 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Goggles which can be tightly sealed.
Protective eye equipment should conform to EN166.

Skin protection:
Wear protective equipment.
Protective clothing that covers arms and legs.
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:
Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway).
The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.
Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	paste pasty grey
Odor	characteristic
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	44 °C (111.2 °F); flash point, Abel; HT-method
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density (20 °C (68 °F))	1,2 g/cm3
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Insoluble
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Solid content	90 %
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity
Reacts with water: Pressure built up in closed vessel (CO2).
Reaction with water, alcohols, amines.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
See section reactivity

10.4. Conditions to avoid
Humidity

10.5. Incompatible materials
See section reactivity

10.6. Hazardous decomposition products
Carbon dioxide is generated under contact with moisture, leading to pressure in the cans. Danger of cans bursting!
At higher temperatures isocyanate may be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.
Persons suffering from allergic reactions to isocyanates should avoid contact with the product.

Sensitizing:
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
An allergic reaction cannot be excluded after repeated skin contact.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Isoparaffinic Hydrocarbon 90622-57-4	LD50	> 5.000 mg/kg	oral		rat	
Xylene - mixture of isomeres 1330-20-7	LD50	3.523 mg/kg	oral		rat	Not specified
Ethylbenzene 100-41-4	LD50	3.500 mg/kg	oral		rat	
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 2.000 mg/kg	oral		rat	
Hexane, 1,6-diisocyanato-, homopolymer, V=7000-11000 mPas/23 28182-81-2	LD50	> 5.000 mg/kg	oral		rat	
p-Toluenesulphonyl isocyanate 4083-64-1	LD50	2.600 mg/kg	oral			
Dibutyltin dilaurate 77-58-7	Acute toxicity estimate (ATE)	500 mg/kg	oral			Expert judgement
Dibutyltin dilaurate 77-58-7	LD50	500 - 2.000 mg/kg			rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Xylene - mixture of isomeres 1330-20-7	LC50	11 mg/l	Vapor.	4 h	rat	

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Isoparaffinic Hydrocarbon 90622-57-4	LD50	> 3.000 mg/kg	dermal		rabbit	
Ethylbenzene 100-41-4	LD50	5.000 mg/kg	dermal		rabbit	
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 9.400 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Xylene - mixture of isomeres 1330-20-7	moderately irritating		rabbit	
4,4'- methylenediphenyl diisocyanate 101-68-8	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Dibutyltin dilaurate 77-58-7	corrosive	24 h	rat	

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Xylene - mixture of isomeres 1330-20-7	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	in vivo	guinea pig	

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Xylene - mixture of isomeres 1330-20-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Ethylbenzene 100-41-4	negative	sister chromatid exchange assay in mammalian cells	with and without		
	negative	in vitro mammalian chromosome aberration test	with and without		
	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Ethylbenzene 100-41-4	negative	intraperitoneal		mouse	Micronucleus assay
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
p-Toluenesulphonyl isocyanate 4083-64-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
	negative	in vitro mammalian chromosome aberration test	with and without		

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
4,4'- methylenediphenyl diisocyanate 101-68-8	carcinogenic	rat	male/female	2 y 6 h/d	inhalation: aerosol	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
p-Toluenesulphonyl isocyanate 4083-64-1	NOAEL F1 = 300 mg/kg	one-generation study oral: gavage		rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Ethylbenzene 100-41-4		inhalation	4weeks6 hours/day, 5 days/week	mouse	OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)
4,4'- methylenediphenyl diisocyanate 101-68-8		inhalation: aerosol	main: 2 y; satellite:1 y6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Dibutyltin dilaurate 77-58-7	NOAEL=40 ppm	oral: feed	90 daysdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

SECTION 12: Ecological information

General ecological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.
Do not empty into drains, soil or bodies of water.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Isoparaffinic Hydrocarbon 90622-57-4	LC50	> 100 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
Isoparaffinic Hydrocarbon 90622-57-4	EC50	> 100 mg/l	Daphnia	96 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Isoparaffinic Hydrocarbon 90622-57-4	NOEC	> 1 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Xylene - mixture of isomeres 1330-20-7	LC50	86 mg/l	Fish		Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Xylene - mixture of isomeres 1330-20-7	EC50	3,1 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Xylene - mixture of isomeres 1330-20-7	EC50	> 1 - 10 mg/l	Algae		Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Xylene - mixture of isomeres 1330-20-7	EC 50	> 1 - 10 mg/l	Bacteria			
Ethylbenzene 100-41-4	LC50	4,2 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethylbenzene 100-41-4	EC50	> 1,8 - 2,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Ethylbenzene 100-41-4	EC50	7,7 mg/l	Algae	96 h	Skeletonema costatum	OECD Guideline 201 (Alga, Growth Inhibition Test)
	NOEC	4,5 mg/l	Algae	96 h	Skeletonema costatum	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethylbenzene 100-41-4	EC 50	> 152 mg/l	Bacteria	30 min		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Ethylbenzene 100-41-4	NOEC	0,96 mg/l	chronic Daphnia	7 d	Ceriodaphnia dubia	OECD 211 (Daphnia magna, Reproduction Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	LC50	> 1.000 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	129,7 mg/l	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	> 1.640 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC 50	> 100 mg/l	Bacteria	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOEC	> 10 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Hexane, 1,6-diisocyanato-, homopolymer, V=7000-11000 mPas/23 28182-81-2	LC50	> 100 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hexane, 1,6-diisocyanato-, homopolymer, V=7000-11000 mPas/23 28182-81-2	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hexane, 1,6-diisocyanato-,	EC0	> 100 mg/l	Algae	72 h	Scenedesmus subspicatus (new	OECD Guideline

homopolymer, V=7000-11000 mPas/23 28182-81-2					name: Desmodesmus subspicatus)	201 (Alga, Growth Inhibition Test)
p-Toluenesulphonyl isocyanate 4083-64-1	LC50	597 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
p-Toluenesulphonyl isocyanate 4083-64-1	EC 50	2.511 mg/l	Bacteria			OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Dibutyltin dilaurate 77-58-7	LC50	7,6 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Dibutyltin dilaurate 77-58-7	EC50	660 µg/l	Daphnia	24 h	Daphnia magna	
Dibutyltin dilaurate 77-58-7	IC50	> 3 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dibutyltin dilaurate 77-58-7	EC0	6 mg/l	Bacteria			

12.2. Persistence and degradability

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Isoparaffinic Hydrocarbon 90622-57-4	readily biodegradable	aerobic	77,6 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Xylene - mixture of isomeres 1330-20-7	readily biodegradable	aerobic	> 60 %	OECD 301 A - F
Ethylbenzene 100-41-4	readily biodegradable	aerobic	69 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
4,4'- methylenediphenyl diisocyanate 101-68-8	Not readily biodegradable.	aerobic	0 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Hexane, 1,6-diisocyanato-, homopolymer, V=7000-11000 mPas/23 28182-81-2		aerobic	1 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
p-Toluenesulphonyl isocyanate 4083-64-1	readily biodegradable		98 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Dibutyltin dilaurate 77-58-7		anaerobic	23 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Isoparaffinic Hydrocarbon 90622-57-4	> 5,1					
Xylene - mixture of isomeres 1330-20-7		8,5	7 d	Oncorhynchus mykiss		
Xylene - mixture of isomeres 1330-20-7	3,12					
Ethylbenzene 100-41-4		1	42 d	Oncorhynchus kisutch	10 °C	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Ethylbenzene 100-41-4	3,6				20 °C	EU Method A.8 (Partition Coefficient)
4,4'- methylenediphenyl diisocyanate 101-68-8		92 - 200	28 d	Cyprinus carpio		OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	5,22					
Dibutyltin dilaurate 77-58-7		31 - 155		Cyprinus carpio		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Dibutyltin dilaurate 77-58-7	4,44				20,8 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Isoparaffinic Hydrocarbon 90622-57-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Xylene - mixture of isomeres 1330-20-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Ethylbenzene 100-41-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
4,4'- methylenediphenyl diisocyanate 101-68-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Dibutyltin dilaurate 77-58-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:
In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.
08 04 09 Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

VOC content 10,3 %
(VOCV 814.018 VOC regulation CH)

VOC Paints and Varnishes (EU):

Product (sub)category: This product is not a subject of the Directive 2004/42/EC

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text
of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
H370 Causes damage to organs.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Further information:
This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Label elements (DPD):

Xn - Harmful

Risk phrases:
R42 May cause sensitization by inhalation.

Safety phrases:
S2 Keep out of the reach of children.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Additional labeling:
Contains isocyanates. See information supplied by the manufacturer.

Contains:
4,4'- methylenediphenyl diisocyanate

Contains Hexane, 1,6-diisocyanato-, homopolymer, V=7000-11000 mPas/23, p-Toluenesulphonyl isocyanate, Dibutyltin dilaurate. May produce an allergic reaction.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.