

# Safety Data Sheet according to (EC) No 1907/2006 as amended

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SDS No.: 190605

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

#### 1.1. Product identifier

TEROSON BOND60 PTA

TEROSON BOND60 PTA

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

Intended use:

2-Component polyurethane adhesive

# 1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.com.

SDSinfo.Adhesive@henkel.com

#### 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: technical.services@henkel.co.uk

# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification (CLP):

Respiratory sensitizer

Category 1

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

#### 2.2. Label elements

# Label elements (CLP):

Hazard pictogram:



**Contains** 4,4'- methylenediphenyl diisocyanate

Signal word: Danger

**Hazard statement:** H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Supplemental information** As from 24 August 2023 adequate training is required before industrial or professional

use.

Further information: https://www.feica.eu/PUinfo

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

Following substances are present in a concentration ≥ the concentration limit for depiction in Section 3 and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in a concentration  $\geq$  the concentration limit for depiction in Section 3 that are assessed to be a PBT, vPvB or ED.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

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

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
Oxydipropyl dibenzoate 27138-31-4 248-258-5 01-2119529241-49	0,25-< 2,5 %	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	Eye Irrit. 2; H319; C >= 5 % Skin Irrit. 2; H315; C >= 5 % Resp. Sens. 1; H334; C >= 0,1 % STOT SE 3; H335; C >= 5 %	

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.

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

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

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

#### 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:

High pressure waterjet

#### 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 cool, dry place.

Temperatures between + 10 °C and + 25 °C

Storage at 5 to 25°C is recommended.

7.3. Specific end use(s)2-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/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Carbon black 1333-86-4 [CARBON BLACK]		3,5	Time Weighted Average (TWA):		EH40 WEL
Carbon black 1333-86-4 [CARBON BLACK]		7	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUSTI		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
Calcium carbonate 471-34-1 [Dust, inhalable dust]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [Dust, respirable dust]		4	Time Weighted Average (TWA):		EH40 WEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Carbon black 1333-86-4 [CARBON BLACK]		3	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE]		10	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [DUSTS NON-SPECIFIC]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [DUSTS NON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [4,4'-METHYLENE-DIPHENYL DIISOCYANATE (AS -NCO)]	0,005		Time Weighted Average (TWA):		IR_OEL
4,4'-Methylenediphenyl diisocyanate		0,02	Time Weighted Average		IR_OEL

101-68-8		(TWA):		
[ISOCYANATES, ALL, EXCEPT				
METHYL ISOCYANATE (CAS NO. 624-				
83-9) AND TOLUENE (2,4 OR 2,6				
DIISOCYANATE (CAS NO. 584-84-9, 91-				
08-7)]				
4,4'-Methylenediphenyl diisocyanate	0,07	Short Term Exposure	15 minutes	IR_OEL
101-68-8		Limit (STEL):		
[ISOCYANATES, ALL, EXCEPT				
METHYL ISOCYANATE (CAS NO. 624-				
83-9) AND TOLUENE (2,4 OR 2,6				
DIISOCYANATE (CAS NO. 584-84-9, 91-				
08-7)]				

# **Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
	•		mg/l	ppm	mg/kg	others	
Oxydipropyl dibenzoate	aqua		0,0037				
27138-31-4	(freshwater)		mg/l				
Oxydipropyl dibenzoate	aqua (marine		0,00037				
27138-31-4	water)		mg/l				
Oxydipropyl dibenzoate	aqua		0,037 mg/l				
27138-31-4	(intermittent						
	releases)						
Oxydipropyl dibenzoate	sediment				1,49 mg/kg		
27138-31-4	(freshwater)						
Oxydipropyl dibenzoate	sediment				0,149		
27138-31-4	(marine water)				mg/kg		
Oxydipropyl dibenzoate	Soil				1 mg/kg		
27138-31-4							
Oxydipropyl dibenzoate	sewage		10 mg/l				
27138-31-4	treatment plant						
	(STP)						
Oxydipropyl dibenzoate	oral				333 mg/kg		
27138-31-4							
Oxydipropyl dibenzoate	Air						no hazard identified
27138-31-4							
4,4'- methylenediphenyl diisocyanate	aqua		0,0037				
101-68-8	(freshwater)		mg/l				
4,4'- methylenediphenyl diisocyanate	aqua		0,037 mg/l				
101-68-8	(intermittent						
	releases)						
4,4'- methylenediphenyl diisocyanate	aqua (marine		0,00037				
101-68-8	water)		mg/l				
4,4'- methylenediphenyl diisocyanate	sediment				11,7 mg/kg		
101-68-8	(freshwater)						
4,4'- methylenediphenyl diisocyanate	sediment				1,17 mg/kg		
101-68-8	(freshwater)						
4,4'- methylenediphenyl diisocyanate	Soil				2,33 mg/kg		
101-68-8							
4,4'- methylenediphenyl diisocyanate	Predator						no potential for
101-68-8							bioaccumulation

# **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Acute/short term exposure - systemic effects		170 mg/kg	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Acute/short term exposure - systemic effects		35,08 mg/m3	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Long term exposure - systemic effects		10 mg/kg	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Acute/short term exposure - systemic effects		80 mg/kg	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Acute/short term exposure - systemic effects		8,7 mg/m3	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Acute/short term exposure - systemic effects		80 mg/kg	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Long term exposure - systemic effects		0,22 mg/kg	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Long term exposure - systemic effects		8,69 mg/m3	no hazard identified
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Long term exposure - systemic effects		5 mg/kg	no hazard identified
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Long term exposure - local effects		0,05 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Acute/short term exposure - local effects		0,1 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Long term exposure - local effects		0,025 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Acute/short term exposure - local effects		0,05 mg/m3	no potential for bioaccumulation

# **Biological Exposure Indices:**

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	 Additional Information
4,4'-Methylenediphenyl	Isocyanate-	Creatinine in	Sampling time: At the		UKEH40BMG	
diisocyanate	derived	urine	end of the period of		V	
101-68-8	diamine		exposure.			
[ISOCYANATES (APPLIES TO						
HDI, IPDI, TDI AND MDI)]						

# 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):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 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.

Eve 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), or equivalent.

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

Delivery form paste Colour Black

Odor Faintly, specific

Physical state solid

Melting point Not applicable, Determination technically not possible

Solidification temperature Not applicable, Product is a solid.

Initial boiling point Not applicable, Decomposes > 140°C (284°F).

Flammability
The product is not flammable.
Explosive limits
Not applicable, Product is a solid.
Flash point
Not applicable, Product is a solid.
Auto-ignition temperature
Not applicable, Product is a solid.

Decomposition temperature Not applicable, Substance/mixture is not self-reactive, no organic

peroxide and does not decompose under foreseen conditions of use

pH Not applicable, Product reacts with water.

Viscosity (kinematic)

Viscosity, dynamic

Not applicable, Product is a solid.

3.500 Pa\*s no method / method unknown

(; Instrument: Physica Rheolab; 20 °C (68 °F))

Solubility (qualitative) Insoluble

(20 °C (68 °F); Solvent: Water)
Partition coefficient: n-octanol/water

Not applicable

Mixture < 0,1 hPa

(20 °C (68 °F)) Density 1,21 - 1,27 g/cm3 QP2107.1; Density

(20 °C (68 °F))

Relative vapour density:

Not applicable, Product is a solid.

Particle characteristics

Not applicable, mixture is a paste.

#### 9.2. Other information

Vapour pressure

Other information not applicable for this product

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Reaction with water, alcohols, amines.

Reacts with water: Pressure built up in closed vessel (CO2).

#### 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

At higher temperatures isocyanate may be released.

Carbon dioxide is generated under contact with moisture, leading to pressure in the cans. Danger of cans bursting!

# **SECTION 11: Toxicological information**

### General toxicological information:

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

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Oxydipropyl dibenzoate 27138-31-4	LD50	3.914 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 2.000 mg/kg	rat	other guideline:

# Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Oxydipropyl dibenzoate 27138-31-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

# Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Oxydipropyl dibenzoate	LC50	> 200 mg/l	dust/mist	4 h	rat	not specified
27138-31-4						

# Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
4,4'- methylenediphenyl diisocyanate 101-68-8	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

# Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Result	Exposure	Species	Method
CAS-No. Oxydipropyl dibenzoate 27138-31-4	not irritating	time	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

# Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
Oxydipropyl dibenzoate	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
27138-31-4		test		
4,4'- methylenediphenyl	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
diisocyanate				
101-68-8				
4,4'- methylenediphenyl	sensitising	Respiratory sensitisation	guinea pig	not specified
diisocyanate				
101-68-8				

### Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Oxydipropyl dibenzoate 27138-31-4	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Oxydipropyl dibenzoate 27138-31-4	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
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)
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

# Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

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

# Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
Oxydipropyl dibenzoate 27138-31-4	NOAEL P > 10000 ppm NOAEL F1 10000 ppm NOAEL F2 10000 ppm	Two generation study	oral: feed	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

# STOT-single exposure:

No data available.

# STOT-repeated exposure:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Oxydipropyl dibenzoate 27138-31-4	NOAEL 1.000 mg/kg	oral: feed	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOAEL 0,0002 mg/l	inhalation: aerosol	main: 2 y; satellite:1 y 6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

# **Aspiration hazard:**

No data available.

#### 11.2 Information on other hazards

not applicable

# **SECTION 12: Ecological information**

# General ecological information:

Do not empty into drains, soil or bodies of water.

# 12.1. Toxicity

# **Toxicity (Fish):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	LC50	3,7 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	LL50	> 100 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)

#### **Toxicity (aquatic invertebrates):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxydipropyl dibenzoate	EL50	19,3 mg/l	48 h	Daphnia magna	OECD Guideline 202
27138-31-4					(Daphnia sp. Acute
					Immobilisation Test)
4,4'- methylenediphenyl	EC50	> 100 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute
diisocyanate					Toxicity for Daphnia)
101-68-8					

# Chronic toxicity (aquatic invertebrates):

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
4,4'- methylenediphenyl	NOEC	10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
diisocyanate					magna, Reproduction Test)
101-68-8					

# **Toxicity (Algae):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxydipropyl dibenzoate 27138-31-4	EL50	4,9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	EL10	0,89 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EL50	> 100 mg/l	72 h	1	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOELR	100 mg/l	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)

# **Toxicity (microorganisms):**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxydipropyl dibenzoate	EC50	> 100 mg/l	3 h	activated sludge of a	OECD Guideline 209
27138-31-4				predominantly domestic sewage	(Activated Sludge,
					Respiration Inhibition Test)
4,4'- methylenediphenyl	EC50	> 1.000 mg/l	3 h	activated sludge of a	OECD Guideline 209
diisocyanate				predominantly domestic sewage	(Activated Sludge,
101-68-8					Respiration Inhibition Test)

# 12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Oxydipropyl dibenzoate 27138-31-4	readily biodegradable	aerobic	85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

### 12.3. Bioaccumulative potential

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
4,4'- methylenediphenyl	92 - 200	28 d		Cyprinus carpio	OECD Guideline 305 E
diisocyanate					(Bioaccumulation: Flow-through
101-68-8					Fish Test)

#### 12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Oxydipropyl dibenzoate	3,9	20 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
27138-31-4			Method)
4,4'- methylenediphenyl	4,51	22 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
diisocyanate			Method)
101-68-8			

#### 12.5. Results of PBT and vPvB assessment

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	PBT / vPvB
Oxydipropyl dibenzoate 27138-31-4	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.

# 12.6. Endocrine disrupting properties

not applicable

#### 12.7. 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. 080409

# **SECTION 14: Transport information**

# 14.1. UN number or ID 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. Maritime transport in bulk according to IMO instruments

not applicable

# **SECTION 15: Regulatory information**

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021):

Not applicable Not applicable Benzo(k)fluoranthene CAS 207-08-9 Benzo(b)fluoranthene CAS 205-99-2 benzo[a]pyrene CAS 50-32-8

VOC content (2010/75/EU)

#### **VOC Paints and Varnishes (EU):**

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

0 %

# 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:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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

H412 Harmful to aquatic life with long lasting effects.

ED: Substance identified as having endocrine disrupting properties

EU OEL: Substance with a Union workplace exposure limit
EU EXPLD 1: Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2 Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC: Substance of very high concern (REACH Candidate List)
PBT: Substance fulfilling persistent, bioaccumulative and toxic criteria

PBT/vPvB: Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very

bioaccumulative criteria

vPvB: Substance fulfilling very persistent and very bioaccumulative criteria

#### **Further information:**

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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.

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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.