

#### SAFETY DATA SHEET

This Safety Data Sheet is provided in compliance with the EC Regulation 1907/2006-2015/830

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

1.1 Product identifier

Product Name: Donseal PU440Product Part Number: C11/07/03/072

- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  - Use of the substance/mixture: One component, non sag, elastomeric polyurethane sealant with high tear and weather resistance
- 1.3 Details of the supplier of the safety data sheet
  - Name of Supplier: Don Construction Products Ltd.
  - Address of Supplier: Hawthorn House, Helions Bumpstead Road,

Haverhill, Suffolkancaster, CB9 7AA, United Kingdom

- Telephone: +44 (0) 1440 766360 - Fax: +44 (0) 1440 768897 - Email: info@dcp-int.co.uk

1.4 Emergency telephone number

#### SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
  - CLP: Resp. Sens. 1, Carc. 2
- 2.2 Label elements



- Signal Word: Danger



## **SECTION 2:** Hazards identification (....)

- Hazard statements

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

H351 - Suspected of causing cancer.

EUH204 - Contains isocyanates. May produce an allergic reaction.

- Precautionary statements

P102 - Keep out of reach of children.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P304+P312 - IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P284 - In case of inadequate ventilation wear respiratory protection.

P501 - Dispose of contents/container to an authorised waste collection point

P314 - Get medical advice/attention if you feel unwell.

P264 - Wash thoroughly after handling

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor/

#### 2.3 Other hazards

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

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

#### 3.2 Mixtures

- polyvinyl chloride

CAS Number: 9002-86-2

EC Number: -

Concentration: 20 - 50%

Categories: Substance with an occupational exposure limit

reaction mass of ethylbenzene and xylene

CAS Number: -

EC Number: 905-588-0 Concentration: 3 - 7%

Categories: Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT

RE 2

Symbols: GHS02, GHS08, GHS07

H Statements: H226, H304, H312, H315, H319, H332, H335, H373 - hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclic < 2% aromatics



## **SECTION 3:** Composition/information on ingredients (....)

CAS Number: -

EC Number: 926-141-6
Concentration: 1 - 5%
Categories: Asp. Tox. 1
Symbols: GHS08

H Statements: H304, EUH066

titanium dioxide

CAS Number: 13463-67-7 EC Number: 236-675-5 Concentration: < 5%

Categories: Substance with an occupational exposure limit

Calcium oxide 74063 STD
 CAS Number: 1305-78-8
 EC Number: 215-138-9

Concentration: < 3%

Categories: Skin Corr. 1C Symbols: GHS05

H Statements: H314, EUH071

- 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

CAS Number: 101-68-8 EC Number: 202-966-0 Concentration: 0.1 - 1%

Categories: Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, Carc. 2,

STOT SE 3, STOT RE 2

Symbols: GHS08, GHS07

H Statements: H351, H332, H373\*\*, H319, H335, H315, H334, H317

- Carbon black

CAS Number: 1333-86-4 EC Number: 215-609-9 Concentration: < 0.5%

Categories: Substance with an occupational exposure limit

Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

CAS Number: -

EC Number: 915-687-0 Concentration: < 0.1%

Categories: Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1

Symbols: GHS09, GHS07 H Statements: H317, H400, H410

The extact percentage (concentration) of the product compositions has been withheld

as a trade secret



#### **SECTION 4:** First aid measures

- 4.1 Description of first aid measures
  - Take off contaminated clothing.
  - Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if patient feels unwell or if discomfort continues.

- Contact with skin

IF ON SKIN: Wash with plenty of soap and water.

Contaminated clothing should be laundered before reuse

If skin irritation occurs: Get medical advice/attention.

- Contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Get immediate medical advice/attention.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious)

Do NOT induce vomiting.

Get medical advice/attention if you feel unwell.

- 4.2 Most important symptoms and effects, both acute and delayed
  - May cause drowsiness
  - May cause headache
  - May cause dizziness
  - May cause nausea/vomiting

See section 11.1 Information on toxicological effects

- 4.3 Indication of any immediate medical attention and special treatment needed
  - No information available

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
  - Extinguish with foam, carbon dioxide, dry powder or water spray.
- 5.2 Special hazards arising from the substance or mixture

Hazardous secomposition by-products that may be emitted during combustion include: Carbon monoxide, Carbon dioxide, Hydrogen cyanide, Oxides of Nitrogen and Oxides of sulphur.

- 5.3 Advice for firefighters
  - Wear self contained breathing apparatus and full protective clothing



#### **SECTION 6: Accidental release measures**

- 6.1 Personal precautions, protective equipment and emergency procedures
  - Evacuate the area and keep personnel upwind
  - Ventilate area

For large spills or spills in confined areas, provide mechanical ventilation to disperse or exhaust vapours.

Refer to other sections of this safety data sheet for information regarding physical and health hazards, respiratory protection, ventilation and personal protective equipment.

#### 6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- 6.3 Methods and material for containment and cleaning up

Collect as much as possible of the spilled material. Place in appropriate and closed container approved for transportation by appropriate authoritiess. Clean up residues. Dispose of collected material as soon as possible according to official regulations.

- 6.4 Reference to other sections
  - See Section 8 and 13

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

- Keep out of reach of children.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Do not get in eyes, on skin, or on clothing.
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wash contaminated clothing before reuse.
- Use personal protective equipment as required.
- Avoid contact with moisture
- Avoid contact with oxidising substances

#### 7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed.
- Keep away from food, drink and aninal feedingstuffs
- Keep away from acids and alkalis
- Keep away from oxidisers, heat, flames or ignition sources
- Keep away from water
- Keep away from moisture
- Incompatible with amines



## **SECTION 7:** Handling and storage (....)

#### 7.3 Specific end use(s)

- No information available

## **SECTION 8:** Exposure controls/personal protection

#### 8.1 Control parameters

If a component is disclosed in section #3 but doesn't appear in the below table, an occupational exposure limit is not available for this component.

As Titanium Dioxide (13463-67-7) is inextricably bound in the polymer matrix, it is not expected to be available as airborne hazard (dust, mist, or spray) under normal condition of use.

As Carbon Black (1333-86-4) is inextricably bound in the polymer matrix, it is not expected to be available as airborne hazard (dust, mist, or spray) under normal condition of use.

Ingredient	C.A.S. No.	Agency	Limit type	Additional comments
Ethylbenzene	100-41-4	ACGIH	TWA: 20 ppm	A3: Confirmed animal carcin.
Ethylbenzene	100-41-4	OSHA	TWA: 435 mg/m <sup>3</sup> (100 ppm)	
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	ACGIH	TWA: 0.005 ppm	
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	OSHA	CEIL: 0.2 mg/m³ (0.02 ppm)	
Calcium oxide	1305-78-8	ACGIH	TWA: 2 mg/m <sup>3</sup>	
Calcium oxide	1305-78-8	OSHA	TWA: 5 mg/m <sup>3</sup>	
Xylene	1330-20-7	ACGIH	TWA: 100 ppm; STEL: 150 ppm	A4: Not class. As human carcin.
Xylene	1330-20-7	OSHA	TWA: 435 mg/m <sup>3</sup> (100 ppm)	
Carbon black	1333-86-4	ACGIH	TWA (inhalable fraction): 3 mg/m³	A3: Confirmed animal carcin.
Carbon black	1333-86-4	OSHA	TWA: 3.5 mg/m <sup>3</sup>	
Titanium dioxide	13463-67-7	ACGIH	TWA: 10 mg/m <sup>3</sup>	A4: Not class. As human carcin.
Titanium dioxide	13463-67-7	OSHA	TWA (as total dust): 15 mg/m³	
Poly(vinyl chloride) polymer	9002-86-2	ACGIH	TWA (respirable fraction): 1 mg/m <sup>3</sup>	A4: Not class. As human carcin.

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: United States Department of Labor - Occupational Safety and Health

Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

**CEIL: Ceiling** 



## **SECTION 8:** Exposure controls/personal protection (....)

#### 8.2 Exposure controls

#### 8.2.1. Engineering controls:

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure

Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

#### 8.2.2. Personal protective equipment (PPE):

#### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face

protection(s) are recommended:

Safety glasses with side shields.

Applicable Norms/Standards

Use eye protection conforming to EN 166

#### Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the

results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the

substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions.

Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from Polymer laminate and tested to EN 374 are recommended.

#### Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of

a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator

type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

Applicable Norms/Standards

Use a respirator conforming to EN 140 or EN 136: filter types A & P

#### **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties



## **SECTION 9: Physical and chemical properties (....)**

- Appearance: Paste - Colour: Multiple - Odour: **Xylene** ≥ 137 °C Boiling Point/Range: - Flashpoint: ≥ 70 °C - Autoignition Temperature: ≥ 200 °C - Lower flammability limit 0.6%(in air) - Upper flammability limit 8.0%(in air) - pH: Not applicable - Specific Gravity: 1.16 ± 0.02

- Viscosity: ≥ 300,000 centipoise at 73.4 deg F

VOC g/I: ≤ 75 (EPA method 24)
 Solubility in water: Insoluble in water

#### 9.2 Other information

- No information available

## **SECTION 10:** Stability and reactivity

#### 10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

#### 10.2 Chemical stability

- Considered stable under normal conditions
- 10.3 Possibility of hazardous reactions
  - No hazardous reactions known if used for its intended purpose
- 10.4 Conditions to avoid
  - Keep away from heat and moisture
- 10.5 Incompatible materials
  - Incompatible with amines
  - Incompatible with alcohols
  - Incompatible with acids and alkalis
- 10.6 Hazardous decomposition products
  - No hazardous decomposition products known

### **SECTION 11:** Toxicological information

11.1 Information on toxicological effects

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## SECTION 11: Toxicological information (....)

#### Acute Toxicity

Name	Route	Species	Value
	Dermal		No data available: calculated ATE >5,000 mg/kg
Overall product	Inhalation-		No data available: calculated ATE >50 mg/l
Overall product	Vapour (4 hr)		No data available. Calculated ATE >50 mg/l
	Ingestion		No data available; calculated ATE >5,000 mg/kg
Poly(Vinyl Chloride)	Dermal		LD50 estimated to be > 5,000 mg/kg
Foly(vinyi chloride)	Ingestion		LD50 estimated to be > 5,000 mg/kg
	Dermal	Rabbit	LD50 > 4,200 mg/kg
Reaction mass of	Inhalation-	Rat	LC50 29 mg/l
ethylbenzene and xylene	Vapour (4 hr)	Nat	EC30 29 Hig/I
	Ingestion	Rat	LD50 3,523 mg/kg
	Dermal	Rabbit	LD50 > 10,000 mg/kg
	Inhalation-		
Titanium dioxide	Dust/Mist	Rat	LC50 > 6.82 mg/l
	(4 hr)		
	Ingestion	Rat	LD50 > 10,000 mg/kg
Calcium oxide	Ingestion	Rat	LD50 > 2,500 mg/kg
	Inhalation-	Professional	
Hydrocarbons, C11-C14,	Vapour	judgement	LC50 estimated to be 20 - 50 mg/l
n-alkanes, isoalkanes,			
cyclics, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
	Ingestion	Rat	LD50 > 5,000 mg/kg
Carbon black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon black	Ingestion	Rat	LD50 > 8,000 mg/kg
	Dermal	Rabbit	LD50 > 5,000 mg/kg
4.41 mashulanadiahanul	Inhalation-		
4,4'-methylenediphenyl diisocyanate	Dust/Mist	Rat	LC50 0.368 mg/l
disocyanate	(4 hr)		
	Ingestion	Rat	LD50 31,600 mg/kg
Reaction mass of	Dermal		LD50 estimated to be 2,000 - 5,000 mg/kg
Bis(1,2,2,6,6- entamethyl-			
4-piperidyl) sebacate and			
Methyl 1,2,2,6,6-	Ingestion	Rat	LD50 3,125 mg/kg
pentamethyl-4-piperidyl			
sebacate			

ATE = acute toxicity estimate



## **SECTION 11:** Toxicological information (....)

## Skin Corrosion/Irritation

Name	Species	Value	
Poly(Vinyl Chloride)	Professional judgement	No significant irritation	
Reaction mass of ethylbenzene and xylene	Rabbit	Mild irritation	
Titanium dioxide	Rabbit	No significant irritation	
Calcium oxide	Human	Corrosive	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Minimal irritation	
Carbon black	Rabbit	No significant irritation	
4,4'-methylenediphenyl diisocyanate	Official classification	Irritant	
Reaction mass of Bis(1,2,2,6,6- entamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	Rabbit	No significant irritation	

#### Serious Eye Damage/Irritation

Name	Species	Value	
Overall product	Rabbit	Mild irritation	
Reaction mass of ethylbenzene and xylene	Rabbit	Mild irritation	
Titanium dioxide	Rabbit	No significant irritation	
Calcium oxide	Rabbit	Corrosive	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes,	Dabbit	Mildiniasias	
cyclics, <2% aromatics	Rabbit Mild irritation		
Carbon black	Rabbit	No significant irritation	
4,4'-methylenediphenyl diisocyanate	Official classification	Severe irritant	
Reaction mass of Bis(1,2,2,6,6- entamethyl-4-			
piperidyl) sebacate and Methyl 1,2,2,6,6-	Rabbit	No significant irritation	
pentamethyl-4-piperidyl sebacate			

#### Skin Sensitization

Name	Species	Value
Titanium dioxide	Human and animal	Not classified
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Guinea pig	Not classified
4,4'-methylenediphenyl diisocyanate	Official classification	Sensitizing
Reaction mass of Bis(1,2,2,6,6- entamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	Guinea pig	Sensitizing

### Respiratory Sensitization

Name	Species	Value
4,4'-methylenediphenyl diisocyanate	Human	Sensitizing



## **SECTION 11:** Toxicological information (....)

#### Germ Cell Mutagenicity

Name	Species	Value
Poly(Vinyl Chloride)	In Vitro	Not mutagenic
Reaction mass of ethylbenzene and	In Vitro	Not mutagenic
xylene	In Vivo	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In Vivo	Not mutagenic
Calcium oxide	In Vitro	Not mutagenic
Hydrocarbons, C11-C14, n-alkanes,	In Vitro	Not mutagenic
isoalkanes, cyclics, <2% aromatics	In Vivo	Not mutagenic
	In Vitro	Not mutagenic
Carbon black	In Vivo	Some positive data exist, but the data
	in vivo	are not sufficient for classification
4.41 methylenedinhenyl diisesyanate	I 1/24	Some positive data exist, but the data
4,4'-methylenediphenyl diisocyanate	In Vitro	are not sufficient for classification
Reaction mass of Bis(1,2,2,6,6-	In Vitro	Not mutagenic
entamethyl-4-piperidyl) sebacate and		
Methyl 1,2,2,6,6-pentamethyl-4-		
piperidyl sebacate		

#### Carcinogenicity

Name	Route	Species	Value
Poly(Vinyl Chloride)	Not specified.	Rat	Some positive data exist, but the data are not sufficient for classification
	Dermal	Rat	Not carcinogenic
Reaction mass of ethylbenzene and	Ingestion	Multiple animal species	Not carcinogenic
xylene	Inhalation	Human	Some positive data exist, but the data are not sufficient for classification
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
	Inhalation	Rat	Carcinogenic.
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified	Not available	Not carcinogenic
	Dermal	Mouse	Not carcinogenic
Carbon black	Ingestion	Mouse	Not carcinogenic
	Inhalation	Rat	Carcinogenic.
4,4'-methylenediphenyl diisocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification



## **SECTION 11:** Toxicological information (....)

#### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure duration
Poly(Vinyl Chloride)	Not specified	Not classified for development	Mouse	NOAEL Not available	During gestation
	Inhalation	Not classified for female reproduction	Human	NOAEL Not available	Occupational exposure
Reaction mass of ethylbenzene and xylene	Ingestion	Not classified for development	Mouse	NOAEL Not available	During organogenesis
	Inhalation	Not classified for development	Multiple animal species	NOAEL Not available	During gestation
Hydrocarbons, C11-C14, n- alkanes, isoalkanes, cyclics, <2% aromatics	Not specified	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
	Not specified	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
	Not specified	Not classified for development	Rat	NOAEL Not available	1 generation
4,4'- methylenediphenyl diisocyanate	Inhalation	Not classified for development	Rat	NOAEL 0.004 mg/l	During organogenesis

#### Lactation

Name	Route	Species	Value
Reaction mass of ethylbenzene and xylene	Ingestion	Mouse	Not classified for effects on or via lactation

#### Aspiration Hazard

Name	Value
Reaction mass of ethylbenzene and xylene	Aspiration hazard
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Aspiration hazard



## **SECTION 11:** Toxicological information (....)

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target organ(s)	Value	Species	Test result	Exposure period
Reaction mass of ethylbenzene and xylene	Inhalation	Auditory system	Causes damage to organs	Rat	LOAEL 6.3 mg/l	8 hours
	Inhalation	Central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
	Inhalation	Respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
	Inhalation	Eyes	Not classified	Rat	NOAEL 3.5 mg/l	Not available
	Inhalation	Liver	Not classified	Multiple animal species	NOAEL Not available	
	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL Not available	
	Ingestion	Eyes	Not classified	Rat	NOAEL 250 mg/kg	Not applicable
Calcium oxide	Inhalation	Respiratory irritation	May cause respiratory irritation	Not available	NOAEL Not available	Occupational exposure
4,4'- methylenediphenyl diisocyanate	Inhalation	Respiratory irritation	May cause respiratory irritation	Official Classific- ation	NOAEL Not available	



## **SECTION 11:** Toxicological information (....)

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target organ(s)	Value	Species	Test result	Exposure period
Poly(Vinyl Chloride)	Inhalation	Respiratory system	Not classified	Multiple animal species	NOAEL 0.013 mg/l	22 months
Reaction mass of ethylbenzene and xylene	Inhalation	Nervous system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.4 mg/l	4 weeks
	Inhalation	Auditory system	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 7.8 mg/l	5 days
	Inhalation	Liver	Not classified	Multiple animal species	NOAEL Not available	
	inhalation	heart   endocrine system   gastrointestinal tract   hematopoietic system   muscles   kidney and/or bladder   respiratory system	Not classified	Multiple animal species	NOAEL 3.5 mg/l	13 weeks
	Ingestion	Auditory system	Not classified	Rat	NOAEL 900 mg/kg/day	2 weeks
	Ingestion	Liver	Not classified	Multiple animal species	NOAEL Not available	
	Ingestion	heart   skin   endocrine system   bone, teeth, nails, and/or hair   hematopoietic system   immune system   nervous system   respiratory system	Not classified	Mouse	NOAEL 1,000 mg/kg/day	103 weeks
Titanium dioxide	Inhalation	Respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.01 mg/l	2 years
	Inhalation	Pulmonary fibrosis	Not classified	Human	NOAEL Not available	Occupational exposure
Carbon black	Inhalation	pneumoconiosis	Not classified	Human	NOAEL Not available	Occupational exposure
4,4'- methylenedip henyl diisocyanate	Inhalation	Respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks



## **SECTION 11:** Toxicological information (....)

#### 11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose

and throat pain. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and

tightness of chest. May cause additional health effects (see below).

#### Skin contact

Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. Allergic skin reaction

(non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

#### Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

May cause additional health effects (see below).

#### Additional Health Effects:

Single exposure may cause target organ effects:

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Prolonged or repeated exposure may cause target organ effects:

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or

numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

#### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Ingredient|CAS No.|Class description|Regulation

Carbon Black|1333-86-4|Grp. 2B: Possible human carc.|International Agency for Research on Cancer

Ethylbenzene|100-41-4|Grp. 2B: Possible human carc.|International Agency for Research on Cancer

Titanium dioxide|13463-67-7|Grp. 2B: Possible human carc.|International Agency for Research on Cancer



## **SECTION 12:** Ecological information

#### 12.1 Toxicity

Reaction mass of ethylbenzene and xylene, CAS No. 905-588-0 Water flea, Estimated, 24 hours, IC50: 1 mg/l Rainbow trout, Estimated, 96 hours, LC50: 2.6 mg/l Green algae, Estimated, 73 hours, EC50: 1.3 mg/l

Hydrocarbons, C11-C14, nalkanes, isoalkanes, cyclics, <2% aromatics, CAS No. 926-141-6 Green algae, Experimental, 72 hours, Effect Level 50%: >1,000 mg/l Water flea, Experimental, 48 hours, Effect Level 50%: >1,000 mg/l Rainbow trout, Experimental, 96 hours, Lethal Level 50%: >1,000 mg/l

Titanium dioxide, CAS No. 13463-67-7 Diatom, Experimental, 72 hours, EC50: >10,000 mg/l Fathead minnow, Experimental, 96 hoursLC50: >100 mg/l Water flea, Experimental, 48 hours, EC50: >100 mg/l

Calcium oxide, CAS No.1305-78-8 Common carp, Experimental, 96 hours, LC50: 1,070 mg/l

4,4'- methylenediphenyl diisocyanate, CAS No.101-68-8 Water flea, Estimated, 24 hours, EC50: >1,000 mg/l Green algae, Estimated, 72 hours, EC50: >1,640 mg/l Zebra fish, Estimated, 96 hours, LC50: >1,000 mg/l

Reaction mass of Bis(1,2,2,6,6- pentamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4- piperidyl sebacate, CAS No.915-687-0 Green algae, Experimental, 72 hours, EC50: 1.68 mg/l Zebra fish, Experimental, 96 hours, LC50: 0.9 mg/l

#### 12.2 Persistence and degradability

Reaction mass of ethylbenzene and xylene, CAS No. 905-588-0 Experimental Biodegradation, 28 days, BOD, 98 % BOD/ThBOD, OECD 301F - Manometric respirometry

Hydrocarbons, C11-C14, nalkanes, isoalkanes, cyclics, <2% aromatics, CAS No. 926-141-6 Experimental Biodegradation, 28 days, BOD, 69 % BOD/ThBOD, OECD 301F - Manometric respirometry

4,4'- methylenediphenyl diisocyanate, CAS No. 101-68-8 Estimated Hydrolysis, Hydrolytic half-life, 20 hours (t 1/2), Other methods

Reaction mass of Bis(1,2,2,6,6- pentamethyl-4- piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate, CAS No. 915-687-0 Experimental Biodegradation, 28 days, Dissolv. Organic Carbon Deplet, 38 % weight, OECD 301E - Modified OECD Scre

#### 12.3 Bioaccumulative potential

Reaction mass of ethylbenzene and xylene, CAS No. 905-588-0 Experimental BCF - Rainbow Tr, 56 days, Bioaccumulation factor, 25.9, Other methods



## **SECTION 12:** Ecological information (....)

Titanium dioxide, CAS No. 13463-67-7 Experimental BCF - Carp, 42 days, Bioaccumulation factor, 9.6, Other methods

4,4'- methylenediphenyl diisocyanate, CAS No. 101-68-8

Experimental BCF - Carp, 28 days, Bioaccumulation factor, 200, OECD 305E - Bioaccumulation flow through fish test

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6pentamethyl-4- piperidyl sebacate, CAS No. 915-687-0

Estimated BCF - Carp, 56 days, Bioaccumulation factor, 31.4 12.4 Mobility in soil

- immiscible with water

12.5 Results of PBT and vPvB assessment

- No information available

12.6 Other adverse effects

- No information available

#### **SECTION 13:** Disposal considerations

#### 13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during

incineration processes. As a disposal alternative, utilize an acceptable permitted waste disposal facility, Empty

drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations

classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes

unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the

available treatment and disposal facilities.

### **SECTION 14:** Transport information

#### 14.1 Air (ICAO/IATA)

Not classified as hazardous for transport

#### 14.2 Road/Rail (ADR/RID)

- Not classified as hazardous for transport

#### 14.3 Sea (IMDG)

Not classified as hazardous for transport

#### 14.4 Environmental hazards



## **SECTION 14:** Transport information (....)

No information available

14.5 Special precautions for user

- No information available

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

- No information available

## **SECTION 15: Regulatory information**

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

Carcinogenicity

Carbon Black, CAS No. 1333-86-4, Grp. 2B: Possible human carc. according to International Agency for Research on Cancer

4,4'- methylenediphenyl diisocyanate, CAS No. 101-68-8, Grp. 3: Not classified according to International Agency for Research on Cancer

Poly(Vinyl Chloride), CAS No. 9002-86-2, Grp. 3: Not classified according to International Agency for Research on Cancer

Titanium dioxide, CAS No. 13463-67-7, Grp. 2B: Possible human carc. according to International Agency for Research on Cancer

15.2 Chemical safety assessment

A REACH chemical safety assessment has not been carried out

#### **SECTION 16: Other information**

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- EUH066: Repeated exposure may cause skin dryness or cracking. EUH071: Corrosive to the respiratory tract. H226: Flammable liquid and vapour. 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. H351: Suspected of causing cancer. 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.

- US NFPA ratings:

Health: 2 Flammability: 2 Instability: 0

Special hazard: None

- US HMIS ratings:

Health: 2\*
Flammability: 2
Physical hazard: 0
Personal protection: X



## **SECTION 16:** Other information (....)

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.

--- end of safety datasheet ---

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