

This safety data sheet complies with the requirements of: REACH Regulation (EC) No 1907/2006, as retained in UK law by (SI 2019/758 as amended)

BOSTIK HYTEC P510 RENORAPID Supercedes Date: 23-Mar-2023 Revision date 23-Mar-2023 Revision Number 1.07

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

1	1	Ρ	'n	ο	d	u	С	t	id	е	n	t	if	ie	ər	

Product Name BOSTIK HYTEC P510 RENORAPID

Pure substance/mixture Mixture

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

Recommended use	Primers, Sealers, and Undercoaters

Uses advised against Consumer use

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

Company Name Bostik Limited Common Rd ST16 3EH Stafford UK Tel: +44 (1785) 27 26 25 Fax: +44 (1785) 25 72 36

E-mail address

SDS.box-EU@bostik.com

#### 1.4. Emergency telephone number

United Kingdom

Bostik: +44 (1785) 272650 (9am to 5pm Mon-Fri) NHS: 111

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

GB CLP (SI 2020/1567 as amended)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Respiratory sensitisation	Category 1 - (H334)
Skin sensitisation	Category 1 - (H317)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity — single exposure	Category 3 - (H335)
Category 3 Respiratory irritation	
Specific target organ toxicity — repeated exposure	Category 2 - (H373)

#### 2.2. Label elements

Contains Prepolymer, based on aromatic polyisocyanate, 4,4'-Methylenediphenyl diisocyanate, o-(p-isocyanatobenzyl)phenyl isocyanate, Diphenylmethane-diisocyanate, isomers and homologues

**BOSTIK HYTEC P510 RENORAPID** 

Supercedes Date: 23-Mar-2023

Revision date 23-Mar-2023 Revision Number 1.07



Signal word Danger

#### Hazard statements

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.

#### Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe mist/vapours/spray

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

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

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

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

P402 + P404 - Store in a dry place. Store in a closed container

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Special provisions concerning the labelling of certain mixtures

Reserved for industrial and professional use. As from 24 August 2023 adequate training is required before industrial or professional use. Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

#### **Additional information**

This product requires tactile warnings if supplied to the general public.

#### 2.3. Other hazards

No information available.

#### PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical name	EC No (EU Index No)	CAS No	Weight-%	Classification according to	Specific concentration limit	REACH registration
				Regulation (EC)		number
				No. 1272/2008		
				[CLP]		

# **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

Revision date 23-Mar-2023 Revision Number 1.07

Prepolymer, based on aromatic polyisocyanate	642-899-8	67815-87-6	>25 - <40	Acute Tox. 4 (H332) STOT SE 3 (H335) STOT RE 2 (H373) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317)	-	[7]
4,4'-Methylenediphenyl diisocyanate	(615-005-00- 9) (615-035-00- 2) 202-966-0	101-68-8	>25 - <40	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373)	Skin Irrit. 2 :: C>=5% Eye Irrit. 2 :: C>=5% Resp. Sens. 1 ::	01-2119457014- 47-XXXX
o-(p-isocyanatobenzyl)p henyl isocyanate	(615-005-00- 9) 227-534-9	5873-54-1	20 - 25	Acute Tox. 4 (H332) Skin Irrit. 2 (H315)	Eye Irrit. 2 :: C>=5% Resp. Sens. 1 :: C>=0.1% Skin Irrit. 2 :: C>=5% STOT SE 3 :: C>=5%	01-2119480143- 45-XXXX
Diphenylmethane-diisoc yanate, isomers and homologues	618-498-9	9016-87-9	10 - <20	STOT SE 3 (H335) STOT RE 2 (H373) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) Acute Tox. 4 (H332)	STOT SE 3 :: C>=5% Skin Irrit. 2 :: C>=5% Eye Irrit. 2 :: C>=5% Resp. Sens. 1 :: C>=0.1%	[7]
2,2'-methylenediphenyl diisocyanate	(615-005-00- 9) 219-799-4	2536-05-2	1 - <2.5	Acute Tox. 4 (H332) Skin Irrit. 2 (H315)	Eye Irrit. 2 :: C>=5% Resp. Sens. 1 :: C>=0.1% Skin Irrit. 2 :: C>=5%	01-2119927323- 43-XXXX

# **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

				Eye Irrit. 2 (H319) Resp. Sens. 1	STOT SE 3 :: C>=5%	
				(H334)		
				Skin Sens. 1 (H317)		
				Carc. 2 (H351)		
				STOT SE 3		
				(H335) STOT RE 2		
				(H373)		
Benzenesulfonyl	(615-012-00-	4083-64-1	0.1 - <0.3	Skin Irrit. 2	STOT SE 3 :: C>=5%	
isocyanate, 4-methyl-	7) 223-810-8			(H315) Eve Irrit 2 (H319)	Skin Irrit. 2 :: C>=5% Eye Irrit. 2 :: C>=5%	47-XXXX
	220 010 0			Resp. Sens. 1		
				(H334)		
				STOT SE 3		
				(H335) (EUH014)		

NOTE [7] - No registration number is given for this substance because it is a polymer exempted from registration according to the provisions of Article 2(9) of REACH. All monomers or other substances within the polymer are registered or exempt from registration

### Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

### Notes

See section 16 for more information

Chemical name	Notes
4,4'-Methylenediphenyl diisocyanate - 101-68-8	C,2
o-(p-isocyanatobenzyl)phenyl isocyanate - 5873-54-1	C,2
2,2'-methylenediphenyl diisocyanate - 2536-05-2	C,2

# SECTION 4: First aid measures

## 4.1. Description of first aid measures

General advice	If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention/advice.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Consult an ophthalmologist.
Skin contact	Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor or poison control centre immediately.
Self-protection of the first aider	Avoid breathing vapours or mists. Avoid contact with skin, eyes or clothing. Use personal

BOSTIK HYTEC P510 RENORAPID Supercedes Date: 23-Mar-2023 Revision date 23-Mar-2023 Revision Number 1.07

	protective equipment as required.
4.2. Most important symptoms and	l effects, both acute and delayed
Symptoms	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Rashes. Hives.
4.3. Indication of any immediate m	edical attention and special treatment needed
Note to doctors	May cause sensitisation in susceptible persons. Symptoms may be delayed. Delayed pulmonary edema may occur. Keep victim under observation. Treat symptomatically.
SECTION 5: Firefighting me	asures
5.1. Extinguishing media	
Suitable Extinguishing Media	Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.
Unsuitable extinguishing media	Full water jet.
5.2. Special hazards arising from t	he substance or mixture
Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapours.
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Isocyanates.
5.3. Advice for firefighters	
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
	gear. Use personal protection equipment.
precautions for fire-fighters SECTION 6: Accidental relea	gear. Use personal protection equipment.
precautions for fire-fighters SECTION 6: Accidental relea	gear. Use personal protection equipment.
precautions for fire-fighters SECTION 6: Accidental relea 6.1. Personal precautions, protect	gear. Use personal protection equipment.  ase measures  ve equipment and emergency procedures  Do not breathe vapour or mist. Ensure adequate ventilation. Avoid contact with skin,
precautions for fire-fighters <b>SECTION 6: Accidental relea</b> <u>6.1. Personal precautions, protect</u> Personal precautions	gear. Use personal protection equipment.  Ase measures  Ve equipment and emergency procedures  Do not breathe vapour or mist. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
precautions for fire-fighters <b>SECTION 6: Accidental relea</b> <u>6.1. Personal precautions, protections</u> Personal precautions Other information	gear. Use personal protection equipment.
precautions for fire-fighters SECTION 6: Accidental relea 6.1. Personal precautions, protect Personal precautions Other information For emergency responders	gear. Use personal protection equipment.
precautions for fire-fighters SECTION 6: Accidental relea 6.1. Personal precautions, protect Personal precautions Other information For emergency responders 6.2. Environmental precautions	gear. Use personal protection equipment. ase measures ve equipment and emergency procedures Do not breathe vapour or mist. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Refer to protective measures listed in Sections 7 and 8. Use personal protection recommended in Section 8. Prevent product from entering drains. Do not allow to enter into soil/subsoil.
precautions for fire-fighters SECTION 6: Accidental relea 6.1. Personal precautions, protect Personal precautions Other information For emergency responders 6.2. Environmental precautions Environmental precautions	gear. Use personal protection equipment. ase measures ve equipment and emergency procedures Do not breathe vapour or mist. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Refer to protective measures listed in Sections 7 and 8. Use personal protection recommended in Section 8. Prevent product from entering drains. Do not allow to enter into soil/subsoil.
precautions for fire-fighters SECTION 6: Accidental relea 6.1. Personal precautions, protect Personal precautions Other information For emergency responders 6.2. Environmental precautions Environmental precautions 6.3. Methods and material for cont	gear. Use personal protection equipment.          ase measures         ve equipment and emergency procedures         Do not breathe vapour or mist. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.         Refer to protective measures listed in Sections 7 and 8.         Use personal protection recommended in Section 8.         Prevent product from entering drains. Do not allow to enter into soil/subsoil.         ainment and cleaning up         Dyke for later disposal and cover with wet sand or earth. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent. Do NOT close container (evolution of carbon dioxide - CO2 ). Keep wet and put outdoors in a secured place for a few days. Then dispose to of according to local / national regulations

### **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

6.4. Reference to other sections	6.4. Reference to other sections							
Reference to other sections	See section 8 for more information. See section 13 for more information.							
SECTION 7: Handling and st	SECTION 7: Handling and storage							
7.1. Precautions for safe handling								
Advice on safe handling	Do not breathe vapour or mist. Use with local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use personal protection equipment. Avoid contact with skin, eyes or clothing.							
General hygiene considerations	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Take off all contaminated clothing and wash it before reuse.							
7.2. Conditions for safe storage, in	cluding any incompatibilities							
Storage Conditions	Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from water or moist air. Keep away from food, drink and animal feedingstuffs.							
Recommended storage temperature	Keep at temperatures between 10 and 35 °C.							
7.3. Specific end use(s)								
<b>Specific use(s)</b> Restricted to professional users. Prin	<b>Specific use(s)</b> Restricted to professional users. Primers, Sealers, and Undercoaters.							
Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.							
Other information	Observe technical data sheet.							
<b>SECTION 8: Exposure contr</b>	ols/personal protection							

# 8.1. Control parameters

## **Exposure Limits**

Chemical name	European Union	United Kingdom
4,4'-Methylenediphenyl diisocyanate	-	TWA: 0.02 mg/m <sup>3</sup>
101-68-8		STEL: 0.07 mg/m <sup>3</sup>
		Sen+
o-(p-isocyanatobenzyl)phenyl isocyanate	-	TWA: 0.02 mg/m <sup>3</sup>
5873-54-1		STEL: 0.07 mg/m <sup>3</sup>
		Sen+
Diphenylmethane-diisocyanate, isomers and	-	TWA: 0.02 mg/m <sup>3</sup>
homologues		STEL: 0.07 mg/m <sup>3</sup> SEN; as -NCO
9016-87-9		
2,2'-methylenediphenyl diisocyanate	-	TWA: 0.02 mg/m <sup>3</sup>
2536-05-2		STEL: 0.07 mg/m <sup>3</sup>
		Sen+
Benzenesulfonyl isocyanate, 4-methyl-	-	TWA: 0.02 mg/m <sup>3</sup>
4083-64-1		STEL: 0.07 mg/m <sup>3</sup>
		Sen+

Chemical name	European Union	Ireland	United Kingdom
4,4'-Methylenediphenyl diisocyanate 101-68-8	-	1 µmol/mol Creatinine (urine - urinary Diamine post task)	-
o-(p-isocyanatobenzyl)phenyl isocyanate	-	<ol> <li>µmol/mol Creatinine (urine - urinary Diamine post task)</li> </ol>	-

#### **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

5873-54-1			
2,2'-methylenediphenyl diisocyanate 2536-05-2	-	1 μmol/mol Creatinine (urine - urinary Diamine post task)	-
Benzenesulfonyl isocyanate, 4-methyl- 4083-64-1	-	1 μmol/mol Creatinine (urine - urinary Diamine post task)	-

## Derived No Effect Level (DNEL) No information available

Derived No Effect Level (DNEL)			
4,4'-Methylenediphenyl diiso	ocyanate (101-68-8)		
Туре	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Short term Systemic health effects	Dermal	50 mg/kg bw/d	
worker Short term Systemic health effects	Inhalation	0.1 mg/m³	
worker Short term Local health effects	Dermal	28700 μg/cm²	
worker Short term Local health effects	Inhalation	0.1 mg/m³	
worker Long term Systemic health effects	Inhalation	0.05 mg/m³	
worker Long term Local health effects	Inhalation	0.05 mg/m³	

o-(p-isocyanatobenzyl)phenyl isocyanate (5873-54-1)			
Туре	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Local health effects	Inhalation	0.05 mg/m³	
worker Short term Local health effects	Inhalation	0.1 mg/m <sup>3</sup>	

Derived No Effect Level (DNEL)				
4,4'-Methylenediphenyl diiso	ocyanate (101-68-8)			
Туре	Exposure route	Derived No Effect Level (DNEL)	Safety factor	
Consumer Short term Systemic health effects	Dermal	25 mg/kg bw/d		
Consumer Short term Systemic health effects	Inhalation	0.05 mg/m³		
Consumer Short term Systemic health effects	Oral	20 mg/kg bw/d		
Consumer Short term Local health effects	Dermal	17200 μg/cm²		
Consumer	Inhalation	0.05 mg/m³		

## **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

Short term Local health effects			
Consumer Long term Systemic health effects	Inhalation	0.025 mg/m³	
Consumer Long term Local health effects	Inhalation	0.025 mg/m³	

# Predicted No Effect Concentration No information available. (PNEC)

Predicted No Effect Concentration (PNEC)		
4,4'-Methylenediphenyl diisocyanate (101-68-8)		
Environmental compartment	Predicted No Effect Concentration (PNEC)	
Freshwater	1 mg/l	
Marine water	0.1 mg/l	
Soil	1 mg/kg dry weight	
Sewage treatment plant	1 mg/l	
Freshwater - intermittent	10 mg/l	

o-(p-isocyanatobenzyl)phenyl isocyanate (5873-54-1)		
Environmental compartment	Predicted No Effect Concentration (PNEC)	
Freshwater	1 mg/l	
Marine water	0.1 mg/l	
Sewage treatment plant	1 mg/l	
Soil	1 mg/kg dry weight	
Freshwater - intermittent	10 mg/l	

2,2'-methylenediphenyl diisocyanate (2536-05-2)		
Environmental compartment	Predicted No Effect Concentration (PNEC)	
Freshwater	1 mg/l	
Marine water	0.1 mg/l	
Sewage treatment plant	1 mg/l	
Soil	1 mg/kg dry weight	
Freshwater - intermittent	10 mg/l	

### 8.2. Exposure controls

Engineering controls	Ensure adequate ventilation, especially in confined areas. Vapours/aerosols must be exhausted directly at the point of origin.
Personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.
Hand protection	Wear suitable gloves. Recommended Use: Nitrile rubber. Butyl rubber. Neoprene <sup>™</sup> . Glove thickness > 0.7mm. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The breakthrough time for the mentioned glove material is in general greater than 60 min. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Gloves must conform to standard EN 374
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	In case of inadequate ventilation wear respiratory protection. During spraying wear suitable respiratory equipment. Wear a respirator conforming to EN 140 with Type A/P2 filter or better.
Recommended filter type:	Organic gases and vapours filter conforming to EN 14387. Brown. White.
Environmental exposure controls	Do not allow uncontrolled discharge of product into the environment.

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

**BOSTIK HYTEC P510 RENORAPID** 

Supercedes Date: 23-Mar-2023

Revision date 23-Mar-2023 Revision Number 1.07

9.1. Information on basic physical and chemical properties				
Physical state	Liquid			
Colour	Yellow to Brown			
Odour	Earthy. Musty.			
Property	Values	Remarks • Method		
Melting point / freezing point	No data available	None known		
Initial boiling point and boiling	No data available	None known		
range				
Flammability	Not applicable for liquids .			
Flammability Limit in Air		None known		
Upper flammability or explosive	No data available			
limits				
Lower flammability or explosive	No data available			
limits				
Flash point	> 200 °C	CC (closed cup)		
Autoignition temperature	No data available	None known		
Decomposition temperature		None known		
pH	No data available	Reacts with water.		
pH (as aqueous solution)	No data available	None known		
Kinematic viscosity	No data available	None known		
Dynamic viscosity	No data available			
Water solubility	Reacts with water.			
Solubility(ies)	No data available	None known		
Partition coefficient	No data available	None known		
Vapour pressure	No data available	None known		
Relative density	1.2			
Bulk Density	No data available			
Density	1.2 g/cm <sup>3</sup>			
Relative vapour density	No data available	None known		
Particle characteristics				
Particle Size	No information available			
Particle Size Distribution	No information available			
9.2. Other information				
Solid content (%)	No information available			
VOC content	No data av	railable		
9.2.1. Information with regards to p Not applicable	physical hazard classes			
0.2.2. Other cafety characteristics				

9.2.2. Other safety characteristics No information available

SECTION 10:	Stability a	and reactivi	ty

10.1. Reactivity	
Reactivity	Product cures with moisture.
10.2. Chemical stability	
Stability	Stable under normal conditions.
Explosion data	
Sensitivity to mechanical	None.
impact Sensitivity to static discharge	None.
10.3. Possibility of hazardous reac	tions

## **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

Possibility of hazardous reactions	None under normal processing.
Hazardous polymerisation	Polymerisation can occur.
10.4. Conditions to avoid	
Conditions to avoid	Product cures with moisture. Excessive heat. Protect from moisture.
10.5. Incompatible materials	
Incompatible materials	Strong acids. Strong bases. Strong oxidising agents.
10.6. Hazardous decomposition pro	oducts_
Hazardous decomposition products	None under normal use conditions.
SECTION 11: Toxicological i	nformation

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

# Information on likely routes of exposure

#### **Product Information**

Inhalation	Harmful by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye contact	Causes serious eye irritation.
Skin contact	Causes skin irritation. May cause sensitisation by skin contact.
Ingestion	Based on available data, the classification criteria are not met.
Symptoms related to the physical,	chemical and toxicological characteristics
Symptoms	Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes.

Acute toxicity

#### Numerical measures of toxicity

#### The following values are calculated based on chapter 3.1 of the GHS document mg/kg ppm ATEmix (inhalation-dust/mist) 1.51 mg/l

### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Prepolymer, based on aromatic polyisocyanate	LD 50 > 2000 mg/kg (Rattus) Richtlinie 84/449/EWG, B.1	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	-
4,4'-Methylenediphenyl diisocyanate	=31600 mg/kg (Rattus) = 9200 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	1.5 mg/L (Rattus) 4 h
o-(p-isocyanatobenzyl)phenyl isocyanate	LD50 >2000 mg/Kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	1.5 mg/L (4h) Rat

## **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

Diphenylmethane-diisocyanate, isomers and homologues	LD50 > 10000 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus)	1.5 mg/L (Rattus) 4 h
2,2'-methylenediphenyl diisocyanate	LD50 > 2000 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	1.5 mg/L (4h) Rat
Benzenesulfonyl isocyanate, 4-methyl-	=2234 mg/kg (Rattus)	LD 50 (Rattus) > 2000 mg/kg OECD 402	>640 ppm (Rattus) 1 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Causes skin irritation.

o-(p-isocyanatobenzyl)phenyl isocyanate (5873-54-1)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404:	Rabbit				irritant
Acute Dermal					
Irritation/Corrosion					

Diphenylmethane-diisocyanate, isomers and homologues (9016-87-9)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404:	Rabbit				Mild skin irritant
Acute Dermal					
Irritation/Corrosion					

Serious eye damage/eye irritation Causes serious eye irritation.

### 4,4'-Methylenediphenyl diisocyanate (101-68-8)

Method	Sp	ecies	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405:	Ra	bbit	Eye	0.1 mL	24 hours	Non-irritant
Acute Eye						
Irritation/Corrosion						

Respiratory or skin sensitisation

 May cause sensitisation by skin contact. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Prepolymer, based on aromatic polyisocyanate (67815-87-6)

Method	Species	Exposure route	Results
OECD Test No. 429: Skin	Mouse		sensitising
Sensitisation: Local Lymph Node			
Assay			

4,4'-Methylenediphenyl diisocyanate (101-68-8)

Method	Species	Exposure route	Results
OECD GD 39	Rat	Inhalation	Sensitizing

Diphenylmethane-diisocyanate, isomers and homologues (9016-87-9)

Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay	Mouse		sensitising

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

**BOSTIK HYTEC P510 RENORAPID** 

#### Component Information

4,4'-Methylenediphenyl diisocyanate (101-68-8)

Method	Species	Results
OECD Test No. 453: Combined Chronic	Rat	Limited evidence of a carcinogenic
Toxicity/Carcinogenicity Studies		effect

o-(p-isocyanatobenzyl)phenyl isocyanate (5873-54-1)

Method	Species	Results
OECD Test No. 453: Combined Chronic	Rat	Carcinogenic
Toxicity/Carcinogenicity Studies		

Diphenylmethane-diisocyanate, isomers and homologues (9016-87-9)

Method	Species	Results
OECD Test No. 453: Combined Chronic	Rat	Carcinogenic
Toxicity/Carcinogenicity Studies		-

Chemical name	European Union
4,4'-Methylenediphenyl diisocyanate	Carc. 2
o-(p-isocyanatobenzyl)phenyl isocyanate	Carc. 2
2,2'-methylenediphenyl diisocyanate	Carc. 2

**Reproductive toxicity** 

Based on available data, the classification criteria are not met.

- **STOT single exposure** May cause respiratory irritation.
- **STOT repeated exposure** May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects

No information available.

# **SECTION 12: Ecological information**

# 12.1. Toxicity

# Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Prepolymer, based on aromatic polyisocyanate 67815-87-6	ErC50 (72h) > 1.640 mg/l Scenedesmus subspicatus (OECD 201)	LC50 (96h) > 1.000 mg/l Danio rerio (OECD 203)	-	EC50 (24h) > 1.000 mg/l Daphnia magna (OECD 202)		
4,4'-Methylenediphenyl	ErC50 (72h)	>1000 mg/l	-	EC50 (24H)		

# BOSTIK HYTEC P510 RENORAPID

Supercedes Date: 23-Mar-2023

diisocyanate	>1640 mg/L	Danio rerio		>1000 mg/L	
101-68-8	Algae			Daphnia magna	
	(scenedesmus				
	subspicatus)				
	(OECD 201)				
o-(p-isocyanatobenzyl)	ErC50 (72h)	LC50 (96 h) >	-	EC50 (24H)	
phenyl isocyanate	>1640 mg/L	1000 mg/l Danio		>1000 mg/L	
5873-54-1	Algae	rerio (OECD		Daphnia magna	
	(scenedesmus	203)			
	subspicatus)				
	(OECD 201)				
Diphenylmethane-diiso		CL50 (96h)	-	EC50 (24H)	
cyanate, isomers and	>1640 mg/L	>1000 mg/L		>1000 mg/L	
homologues	Algae	Danio rerio		Daphnia magna	
9016-87-9	(scenedesmus				
	subspicatus)				
	(OECD 201)				
2,2'-methylenediphenyl	-	LC50 (96 h) >	-	-	
diisocyanate		1000 mg/l Danio			
2536-05-2		rerio (OECD			
		203)			

### 12.2. Persistence and degradability

## Persistence and degradability No information available.

#### 4,4'-Methylenediphenyl diisocyanate (101-68-8)

Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent	28 days	0% biodegradation	Not readily biodegradable
Biodegradability: Modified MITI Test		-	
(11)			

#### Diphenylmethane-diisocyanate, isomers and homologues (9016-87-9)

Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent	28 days	0% biodegradation	Not readily biodegradable
Biodegradability: Modified MITI Test		-	- <u>-</u>
(11)			

## 12.3. Bioaccumulative potential

#### Bioaccumulation

#### **Component Information**

Chemical name	Partition coefficient
4,4'-Methylenediphenyl diisocyanate	4.51
Benzenesulfonyl isocyanate, 4-methyl-	0.6

#### 12.4. Mobility in soil

Mobility in soil No informa

### No information available.

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

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
4,4'-Methylenediphenyl diisocyanate	The substance is not PBT / vPvB
o-(p-isocyanatobenzyl)phenyl isocyanate	The substance is not PBT / vPvB
2,2'-methylenediphenyl diisocyanate	The substance is not PBT / vPvB
Benzenesulfonyl isocyanate, 4-methyl-	The substance is not PBT / vPvB

### **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

**12.7.** Other adverse effects No information available.

# SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste from residues/unused products	Uncured product should be disposed of as hazardous waste. Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.
Contaminated packaging	Handle contaminated packages in the same way as the product itself.
European Waste Catalogue	08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances 08 05 01* waste isocyanates 15 01 10*: Packaging containing residues of or contaminated by dangerous substances
Other information	Waste codes should be assigned by the user based on the application for which the product was used.

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

Land transport (ADR/RID)	
14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
IMDG14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing group14.5Marine pollutant14.6Special precautions for user Special Provisions14.7Maritime transport in bulk according to IMO instruments	Not regulated Not regulated Not regulated Not regulated NP None
Transport in bulk according to	Annex II of MARPOL and the IBC Code Not applicable
Air transport (ICAO-TI / IATA-DGR) 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es)	Not regulated Not regulated Not regulated Not regulated
14.4 Packing group 14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
-	

# Section 15: REGULATORY INFORMATION

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

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

#### Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

#### SVHC: Substances of Very High Concern for Authorisation:

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

#### EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	CAS No	Restricted substance per REACH Annex XVII
4,4'-Methylenediphenyl diisocyanate	101-68-8	56[a]. 75. 74.
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	56[b]. 75. 74.
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	56 74.
2,2'-methylenediphenyl diisocyanate	2536-05-2	56[c]. 75. 74.
Diisocyantes		74

**56**. If product supplied to the general public with substance  $\ge 0.1\%$ , then gloves must be provided with the product. **74** If product supplied to the industrial or professional users with total monomeric diisocyanates  $\ge 0.1\%$ , then its packaging must mention "As from 24 August 2023 adequate training is required before industrial or professional use".

#### Substance subject to authorisation per REACH Annex XIV

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

# Persistent Organic Pollutants

Not applicable

#### National regulations

#### **BOSTIK HYTEC P510 RENORAPID**

Supercedes Date: 23-Mar-2023

#### 15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture

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

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

EUH014 - Reacts violently with water

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

#### Notes relating to the identification, classification and labelling of substances

**Note C:** Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

## Notes relating to the classification and labelling of mixtures

Note 2: The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture

Legend	
TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value
*	Skin designation
SVHC	Substance(s) of Very High Concern
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB	Very Persistent and very Bioaccumulative (vPvB) Chemicals
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
EWC	European Waste Catalogue
ADR	European Agreement concerning the International Carriage of Dangerous Goods by
	Road
IMDG	International Maritime Dangerous Goods (IMDG)
ΙΑΤΑ	International Air Transport Association (IATA)
RID	Regulations concerning the International Transport of Dangerous Goods by Rail

Key literature references and sou No information available Prepared By Revision date Indication of changes	rces for data Product Safety & Regulatory Affairs 23-Mar-2023
Revision note Training Advice	SDS sections updated: 2, 3, 9, 11, 15. When working with hazardous materials, regular training of operators is required by law AS FROM 24 AUGUST 2023 ADEQUATE TRAINING IS REQUIRED BEFORE INDUSTRIAL OR PROFESSIONAL USE For further information, please contact: https://www.safeusediisocyanates.eu/ No information available
Further information	

#### This material safety data sheet complies with requirements of UK REACH Regulations (SI 2019/758 as amended)

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of

BOSTIK HYTEC P510 RENORAPID Supercedes Date: 23-Mar-2023 Revision date 23-Mar-2023 Revision Number 1.07

its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

End of Safety Data Sheet