



# SpECTite Polyurea H

LIQUID APPLIED POLYUREA HYBRID MEMBRANE

## DESCRIPTION

**SpECTite Polyurea H** is a two part, elastic, 100% solids, very fast curing and coloured polyurea hybrid liquid applied membrane with good chemical resistance. Suitable for use in hot and tropical climatic conditions.

## TYPICAL USES

**SpECTite Polyurea H** may only be used by experienced professionals.

### On concrete

- Waterproofing on walkways and balconies
- Waterproofing on floors and car park decks
- Water retaining structures in power plants
- Secondary containment structures
- Tank, bund and pit lining in sewage and waste water treatment plants
- Waterproofing on concrete bridge decks, membrane underneath hot rolled asphalt, certified in accordance to BBA/HAPAS
- Waterproofing on concrete bridge decks, membrane underneath mastic asphalt, tested in accordance to ETAG 033
- Waterproofing for cut and cover structures
- Waterproofing for submersed structures

### On steel

- Truck bed lining

## ADVANTAGES

- Good abrasion resistance
- Excellent crack bridging properties
- Moderate chemical resistance
- Almost immediate return-to-service time
- Applicable in temperatures from -10 °C to +50 °C
- Performs in constant dry temperatures from -30 °C to +100 °C
- Very fast reactivity and curing time

## TECHNICAL DATA

<b>Appearance (Part A)</b>	Coloured
<b>Density (Part A)</b>	1.03 kg/l
<b>Appearance (Part B)</b>	Clear Yellowish
<b>Density (Part B)</b>	1.11 kg/l
<b>Viscosity @ 20°C (Part A)</b>	900 - 1300 cp
<b>(Part B)</b>	600 - 850 cp
<b>Viscosity @ 25°C (Part A)</b>	~750 cp
<b>(Part B)</b>	500 cp
<b>Tensile Strength</b>	
<b>(DIN 53504)</b>	9 ± 2 N/mm <sup>2</sup>
<b>Elongation at Break</b>	
<b>(DIN 53504)</b>	300 ± 25 %
<b>Shore A Hardness</b>	
<b>(DIN 53505)</b>	80 ± 5
<b>Abrasion Resistance</b>	
<b>CS17/1000g/1000cy</b>	
<b>(ISO 5470-1)</b>	10 - 15 mg
<b>Crack Bridging Ability</b>	
<b>Class A5</b>	Static
<b>Chemical Resistance</b>	
De-icing Salts	
Bitumen	
Allkalis	
Fresh & Ground Water	
Various Chemicals	
<b>Mixing Ratio</b>	
<b>Part A : Part B (Volume)</b>	1 : 1
<b>Product Temperature</b>	> +65°C
<b>Relative Humidity</b>	<85%
<b>Gel Time</b>	12 sec at +20°C
<b>Waiting Time</b>	1 - 2 min at +20°C

## APPLICATION INSTRUCTIONS

### Surface Preparation

The surface must be sound, of sufficient strength, clean, dry and free of dirt, oil, grease and other contamination. The substrate must be primed with

**SpECTite Primer EP121** epoxy primer prior to application of **SpECTite Polyurea H**. **SpECTop NS Grains** may be broadcasted over the primer for better adhesion properties if required.

#### **Substrate Quality**

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull off strength of 1.5 N/mm<sup>2</sup>. The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and

surface treatments, etc. Concrete substrates must be pre-pared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from SpEC. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.

#### **Application**

Dose and mix with a suitable air driven or electrical plural component heated spray equipment. Both components must be heated up to minimum +70°C. The accuracy of mixing and dosage must be controlled regularly with the equipment. Thoroughly stir part A using a drum stirrer until a homogenous colour is obtained. Spray trial should be done before commencing any work to setup spray equipment properly.

#### **PACKAGING & YIELD**

**SpECTite Polyurea H** is supplied in:

Part A = 205 kg drums

Part B = 222 kg drums

The coverage rate for **SpECTite Polyurea H** is 1.06 kg/m<sup>2</sup>/mm (approx.).

**Layer thickness** 1.5 mm - 2 mm

#### **EQUIPMENT CLEANING**

All equipment may be cleaned of uncured material using **SpECTop Cleaning Fluid**.

#### **STORAGE & SHELF LIFE**

**SpECTite Polyurea H** has a shelf life of 12 months when stored in original containers in cool, dry conditions. Protect the material against moisture and direct sunlight. Storage temperature: 5°C to 30°C.

#### **HEALTH & SAFETY**

Contact with skin and eyes should be avoided. It is essential that adequate ventilation is provided and that all personnel avoid inhaling the vapours produced. If working is necessary in a confined area it is strongly recommended that sealed respiratory equipment is utilised.

#### **Eye contact**

Rinse with copious amounts of clean water and seek medical attention.

#### **Skin contact**

Rinse with copious amounts of clean water followed by thorough cleaning with soap and water.

#### **DO NOT USE SOLVENTS**

#### **Ingestion**

Seek immediate medical attention.

**DO NOT INDUCE VOMITING.**

---

Issue 2: 04/2022

**QA-054**

Whilst the information and/or specifications given are, to the best of our knowledge, true and accurate, no warranty is given or implied in connection with any recommendations or suggestions made by us, our representatives, agents or distributors as the conditions of use and labour involved are beyond our control.

If it is proven that the product does not perform as described in our TDS, SpEC's liability extends solely to the free replacement of product, once the claim has been accepted after due investigation by SpEC. SpEC will not entertain any claims involving any form of consequential costs or damages such as shipping costs, custom duties, damages to third parties, damages to structures, penalties from delay of a project or any other form of consequential damage.

**SPECIALITY ENGINEERING CHEMICALS**

PO Box 61347, Dubai, United Arab Emirates. Telephone: +971 4 883 6662, Fax: +971 4 883 7696

E-mail: [info@spec.ae](mailto:info@spec.ae)

[www.spec.ae](http://www.spec.ae)



# SpECTite Polyurea P

LIQUID APPLIED PURE POLYUREA MEMBRANE

## DESCRIPTION

**SpECTite Polyurea P** is a two part, elastic, 100 % solids, very fast curing and coloured pure polyurea liquid applied membrane with excellent chemical resistance. Suitable for use in hot and tropical climatic conditions.

## TYPICAL USES

**SpECTite Polyurea P** may only be used by experienced professionals.

### On concrete

- Abrasion resistant protective coating in industrial and manufacturing facilities
- Waterproofing for cut and cover structures
- Waterproofing for submersed structures
- Waterproofing on walkways and balconies
- Waterproofing on floors and car park decks
- Water retaining structures in power plants
- Secondary containment structures
- Tank, bund and pit lining in sewage and waste water treatment plants

### On steel

- Truck bed lining
- Waterproofing and wearing layer on steel ridges

## ADVANTAGES

- Almost immediate return-to-service time
- Excellent crack bridging properties
- Good chemical resistance
- Excellent abrasion resistance
- UV light exposure may lead to yellowing

## TECHNICAL DATA

<b>Appearance (Part A)</b>	Coloured
<b>Density (Part A)</b>	1.00 kg/l
<b>Appearance (Part B)</b>	Clear Yellowish
<b>Density (Part B)</b>	1.11 kg/l
<b>Viscosity @ 20°C (Part A)</b>	900 - 1300 cp
<b>(Part B)</b>	600 - 850 cp

<b>Viscosity @ 25°C (Part A)</b>	~750 cp
<b>(Part B)</b>	500 cp
<b>Tensile Strength (DIN 53504)</b>	11 ± 2 N/mm <sup>2</sup>
<b>Elongation at Break (DIN 53504)</b>	325 ± 25 %
<b>Shore A Hardness (DIN 53505)</b>	85 ± 5
<b>Abrasion Resistance CS17/1000g/1000cy (ISO 5470-1)</b>	0 - 5 mg
<b>Crack Bridging Ability Class A5</b>	Static
<b>Chemical Resistance</b>	
De-icing Salts	
Bitumen	
Allkalis	
Fresh & Ground Water	
Various Chemicals	
<b>Mixing Ratio</b>	
<b>Part A : Part B (Volume)</b>	1 : 1
<b>Product Temperature</b>	> +65°C
<b>Relative Humidity</b>	<85%
<b>Gel Time</b>	~11 sec at +20°C
<b>Waiting Time</b>	1 - 2 min at +20°C

## APPLICATION INSTRUCTIONS

### Surface Preparation

The surface must be sound, of sufficient strength, clean, dry and free of dirt, oil, grease and other contamination. The substrate must be primed with **SpECTite Primer EP121** epoxy primer prior to application of **SpECTite Polyurea P**. **SpECTop NS Grains** may be broadcasted over the primer for better adhesion properties if required.

### Substrate Quality

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull off strength of 1.5 N/mm<sup>2</sup>. The substrate must be clean, dry and free of all

contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Concrete substrates must be pre-pared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from SpEC. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.

#### **Application**

Dose and mix with a suitable air driven or electrical plural component heated spray equipment. Both components must be heated up to minimum +70°C. The accuracy of mixing and dosage must be controlled regularly with the equipment. Thoroughly stir part A using a drum stirrer until a homogenous colour is obtained. Spray trial should be done before commencing any work to setup spray equipment properly.

#### **PACKAGING & YIELD**

**SpECTite Polyurea P** is supplied in:

Part A = 200 kg drums

Part B = 222 kg drums

The coverage rate for **SpECTite Polyurea P** is 1.06 kg/m<sup>2</sup>/mm (approx.).

**Layer thickness**            1.5 mm - 2 mm

#### **EQUIPMENT CLEANING**

All equipment may be cleaned of uncured material using **SpECTop Cleaning Fluid**.

#### **STORAGE & SHELF LIFE**

**SpECTite Polyurea P** has a shelf life of 12 months when stored in original containers in cool, dry conditions. Protect the material against moisture and direct sunlight. Storage temperature: 5°C to 30°C.

#### **HEALTH & SAFETY**

Contact with skin and eyes should be avoided. It is essential that adequate ventilation is provided and that all personnel avoid inhaling the vapours produced. If working is necessary in a confined area it is strongly recommended that sealed respiratory equipment is utilised.

#### **Eye contact**

Rinse with copious amounts of clean water and seek medical attention.

#### **Skin contact**

Rinse with copious amounts of clean water followed by thorough cleaning with soap and water.

#### **DO NOT USE SOLVENTS**

#### **Ingestion**

Seek immediate medical attention.

**DO NOT INDUCE VOMITING.**

Issue 2: 04/2022

**QA-054**

Whilst the information and/or specifications given are, to the best of our knowledge, true and accurate, no warranty is given or implied in connection with any recommendations or suggestions made by us, our representatives, agents or distributors as the conditions of use and labour involved are beyond our control.

If it is proven that the product does not perform as described in our TDS, SpEC's liability extends solely to the free replacement of product, once the claim has been accepted after due investigation by SpEC. SpEC will not entertain any claims involving any form of consequential costs or damages such as shipping costs, custom duties, damages to third parties, damages to structures, penalties from delay of a project or any other form of consequential damage.

#### **SPECIALITY ENGINEERING CHEMICALS**

PO Box 61347, Dubai, United Arab Emirates. Telephone: +971 4 883 6662, Fax: +971 4 883 7696

E-mail: [info@spec.ae](mailto:info@spec.ae)

[www.spec.ae](http://www.spec.ae)