



# POLYSPEED P500

## PRODUCT TECHNICAL DATA

<b>FULL DESCRIPTION</b>	: POLYSPEED P500 POLYMER LINING
<b>MATERIAL TYPE</b>	: Spray applied solvent free polyurea lining system
<b>RECOMMENDED USE</b>	: PolySpeed P500 Polymer Lining is a fast curing, solvent free polyurea for the internal coating of pipelines in situ. PolySpeed should only be used in pipelines where it has been, previously, deemed fit for use. : Waterproofing membrane. : Encapsulation : Secondary containment lining : Tank lining for aqueous systems.
<b>RECOMMENDED APPLICATION METHODS</b>	: Specialist Application Equipment
<b>COLOUR AVAILABILITY</b>	: Limited Range
<b>FLASH POINT</b>	: Above 55°C
<b>% SOLIDS BY VOLUME</b>	: 100%
<b>PRACTICAL APPLICATION RATES- microns per coat</b>	: <b>Specialist Application Kit</b> : Dry 5mm : Wet 5mm : Theoretical coverage 0.2m <sup>2</sup> /L * <i>Maximum dry film thickness typically 20mm dry by spray</i>
<b>AVERAGE DRYING TIMES</b>	: <b>At 23°C</b> : <b>To touch</b> : 5 seconds : <b>To recoat</b> : 1 hour : <b>To handle</b> : 20 seconds <i>These figures are given as a guide only. Factors such as air movement and humidity must also be considered.</i>
<b>RECOMMENDED CLEANSER</b>	: Cleanser/Thinner No. 13
<b>RESISTANCE TO</b>	: Moisture - Excellent
<b>RECOMMENDED TOPCOATS</b>	: Overcoatable with itself between 1 hour and 24 hours.
<b>GEL TIME</b>	: 3 seconds
<b>PACKAGE</b>	: <b>Pack Size</b> : 400 litre pack : <b>Mixing Ratio</b> : 1:1 by volume : <b>Weight</b> : 1.2 kg/litre : <b>Shelf Life</b> : 6 months from date of manufacture or 'Use By' date where specified

## **SURFACE PREPARATION:**

Steel surfaces should be blast cleaned to Sa2½ BS EN ISO 8501-1:2007. Minimum surface profile 75 microns.

Concrete surfaces should be blast tracked or UHP water blasted.

Ensure surfaces to be coated are clean, dry and free from all surface contamination.

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## **APPLICATION EQUIPMENT:**

### **Twin Component Spray**

Nozzle Size : 0.97mm (38 thou)

Fan Angle : 40° or 80°

Operating Pressure : 210kg/cm<sup>2</sup> (3000 psi)

The details of twin component spray tip orifice size, fan angle and pressure are given as a guide only. The fan angle given is for work on large flat surfaces. Smaller fan angles should be used where the size of the work to be sprayed makes this appropriate. It may be found that slight variation in tip orifice size or pressure will provide optimum atomisation in some circumstances. In general, the operating pressure should be the lowest possible consistent with satisfactory atomisation.

Material is to be applied using Graco Reactor Plural Component Spray (or equivalent ) with high pressure impingement mix gun. Both base and additive need pre-heating to a minimum temperature of 60°C while re-circulating through the unit, so that satisfactory spray application properties are obtained. Suitable insulated and heated lines should be used to maintain temperature prior to spraying.

**N.B.** After application the gun and equipment should be cleansed with Leighs Cleanser/Thinner 13. Once clean the lines and pump should be filled with chlorinated paraffin for storage.

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## **APPLICATION CONDITIONS AND OVERCOATING:**

The material should preferably be applied at temperatures in excess of 10°C. In conditions of high relative humidity, ie 80-85% good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C.

Application at ambient air temperatures below 0°C is not recommended.

If it is desired to overcoat outside the times stated on the data sheet, please seek advice of Leighs Customer Service Department.

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## **ADDITIONAL NOTES:**

Drying times, curing times and pot life should be considered as a guide only.

**The reaction between the base component and catalyst is highly exothermic. Deviation from the recommended mixing ratio should not be undertaken without first consulting Sherwin-Williams. Do not mix the material in bulk.**

There may be slight variations in colour from batch to batch. Larger variations in colour, when using twin component spray, may indicate a fault with the spray equipment and this should be checked to ensure the correct ratio of base and additive are being delivered.

**PolySpeed P500 should not be thinned with cleanser thinners or any other solvent. Thinning will severely impair the curing mechanism and subsequent performance. Thinning with normal paint solvents can lead to exothermic reaction and possible fire or explosion hazard.**

Numerical values quoted for physical data may vary slightly from batch to batch.

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## **HEALTH AND SAFETY:**

Consult Product Health and Safety Data Sheet for information on safe handling and application of this product.

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Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Sherwin-Williams can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this Data Sheet is liable to modification from time to time in the light of experience and of normal product development, and before using, customers are advised to check with Sherwin-Williams, quoting the reference number, to ensure that they possess the latest issue.