

# Plastipur®

HDR Polyurethane concrete flooring  
rake and trowel grade application

**Product description** **Plastipur® HDR** is a fast application, rake and trowel applied development of the well proven **Plastipur® HT** range of Polyurethane flooring systems. **Plastipur® HDR** provides exceptional all-round performance with excellent chemical, wear, impact and abrasion resistance. **Plastipur® HDR** provides an effective slip resistant surface, whilst the resin rich composition aids cleanability. **Plastipur® HDR** also provides excellent thermal shock resistance.

## Key facts:

- Solvent free
- Excellent cleanability
- Excellent mechanical strength
- Excellent adhesion characteristics
- Excellent all-round chemical resistance
- Temperature resistant at temperatures from -25 °C to 120 °C at 9mm
- Fast curing
- Can be steam cleaned
- Reduced installation times

## Performance data:

Compressive Strength:	58.0 N/mm <sup>2</sup>
Compressive Modulus:	9850 N/mm <sup>2</sup>
Flexural Strength:	15 N/mm <sup>2</sup>
Flexural Modulus:	2400 N/mm <sup>2</sup>
Tensile Strength:	6.0 N/mm <sup>2</sup>
Tensile Modulus:	450.3 N/mm <sup>2</sup>
Temperature Resistance:	Constant -25 °C to 100 °C Occasional steam up to 120 °C at 9mm
Flash Steam Cleanable:	Yes
Water Permeability:	Zero
TRRL slip resistance:	60 wet, 80 dry
Abrasion Resistance:	1120 (Taber mg loss/1000 cycles/1kg load with H18 wheel)

All figures are measured and expressed under laboratory conditions: Actual performance may vary from the above values depending upon site conditions.

## Physical properties:

Primer(s): 1 application of **Plastipur® 427** primer or Plastistone Primer  
System: 1 rake or trowel application of **Plastipur® HDR**  
Sealer Coat(s): None as standard

### System Details:

Finish: White speckled resin rich, smooth, matt, anti-slip  
Thickness: 6mm to 9mm

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### Chemical Resistance:

Resistant to a wide range of chemicals including sugars, oils, alkalis, most acids and some solvents. For full details consult the Plasti-Chemie technical Dept.

### Curing Time:

A completed resin floor can go into service after the following minimum cure period at 18 °C and above:

Light Traffic:	16 hours
Heavy Traffic:	48 hours

### Shelf Life and Storage:

The product should be kept in its original unopened container until use. The product should be stored in weather tight conditions at temperatures between 10 °C and 25 °C, avoiding direct sunlight. Under these conditions this product has a shelf life of up to 6 months.

#### Other Products:

The following products are recommended for use with **Plastipur®** HDR:  
**Plastipur®** WR resin render screed

### Standard Colour Range:

Red	Buff	Terracotta
Green	Grey	Cream

As screen and print settings are beyond our control, these colours are an indication only. Please request product samples for accurate colour information of any of these six standard colours.

### Application:

Wet and Dry Food Processing, eg. Abattoirs, Bakeries  
Pharmaceutical Production  
Brewing and Beverage  
Chemical Processing  
Heavy Engineering  
Aerospace

### Application Temperature:

Correct temperature is critical to the successful application of **Plastipur®** HDR and air temperatures should be maintained between 12 °C and 25 °C during the application and curing period of this product. We also strongly recommend that the application area is heated to temperatures of between 12 °C and 25 °C for up to 24 hours prior to application to allow the ambient and substrate temperatures to regulate before the application commences. Materials should also be kept in a warm area of 12 °C minimum temperature for 12 hours prior to application. De-humidifiers must be used where high humidity conditions prevail. Ensure adequate ventilation during application.

### Priming:

The dry, prepared, dust-free substrate should receive a roller applied tack

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coat of **Plastipur®** primer. After approximately 30 minutes tack off time, the **Plastipur®** HDR can be applied.

### System Application:

The **Plastipur®** HDR should be mixed and rake and/or trowel applied at a thickness of between 6 and 9mm.

### Joints:

All known expansion joints should be followed through the resin floor finish using a PU Jointing Mastic. If concrete movement or cracking takes place after application then reflective cracking of the topping may occur.

Note: The texture of **Plastipur®** HDR on the finished floor surface may appear banded or slightly variable. This is a natural, visual aspect of the system, which can also be influenced by atmospheric conditions and is not defective in anyway. Polyurethane systems have limited colour stability which can result in discoloration of the floor over a period of time upon exposure to UV light. Our standard colour range has been carefully chosen to provide a colour range limiting the extent of discolouration.

### In-Service Maintenance:

Good housekeeping and regular cleaning can considerably extend the service life of a resin screed floor and will enhance the floor's appearance and reduce soiling tendencies. Suitable cleaning methods for this product include: Rotary scrubbing machine or hot water washing (up to 80 °C) with suitable detergent products. Flash steam clean is suitable on an occasional basis.

Data concerning our products and devices as well as concerning our data and procedures are based on an extensive research work and an application technology experience. We obtain these results, with which we do not take over adhesion going beyond the respective single contract, in word and writing after best knowledge, reserve ourselves we however technical changes in the course of the product development. That does not relieve the user however to examine our data and recommendations before their use responsible for the own use. That applies also regarding the keeping of patent rights third as well as for applications and procedures, which are not expressly in writing indicated by us.