



A **SHERWIN-WILLIAMS** Company



REF : TIFL 2016 11

Resutile

DESCRIPTION

Resutile is a high grade, two-pack, hard wearing polyurethane floor coating designed for maximum chemical resistance which is light-fast and flexible. Resutile has good resistance to impact abrasion and trafficking. The system is resistant to high temperatures up to 150°C and is available in a range of Colours or Clear. Resutile is regularly used in the Aviation Industry as it has superb resistance to Skydrol.

ADVANTAGES

- Excellent chemical resistance
- UV stable, will not discolour
- Some flexibility
- Good abrasion and impact resistance
- Ease of cleaning , including removal of graffiti
- Anti-slip finishes can be created by applying a scatter of aggregate
- Excellent resistance to thermal shock and hot water
- Available in a range of attractive colours

RECOMMENDED USES

- Aircraft hangars
- Laboratories
- Chemical plants
- Prisons and police cells
- Operating theatres
- Schools
- Pharmaceutical areas
- Toilets

PRODUCT INFORMATION

| System thickness (dry) | Solids content by weight | Pack sizes | Pack make up | Shelf life | Storage |
|------------------------|--------------------------|-----------------------|--------------------------|--------------------------------|--|
| 60 microns (Per coat) | 67 % | 2.5 litres & 5 litres | 1 X Base 1 X Hardener | 12 months in sealed containers | Keep out of direct sunlight. Store in a dry place, not below 15°C |

DRYING TIMES & COVERAGE RATES at 20°C

| Coverage rate | Pot life | Recoat time | Light traffic | Full traffic | Full chemical cure |
|--|-------------------------|--|---------------|--------------|--------------------|
| 2.5 litre - 20 sq m 5 litre - 40 sq m @ 60 microns | 40 minutes after mixing | 6 hours or once surface has lost tackiness | 24 Hours | 3 Days | 7 days |



Specification

Product : Resutile

Finish : Gloss

Thickness : 60 microns

Colour : Clear or see RSL Colour chart for colours

Products required for this system

Prime : Resuseal WB Clear

System : Resutile

Surface Seal : N/A

Preparation

New Floors: New concrete must be clean, sound, dry and fully cured and surface laitence removed, preferably by shot blasting, mechanical abrasion or chemical etching. Moisture content should be checked prior to application. Do not apply to substrates with moisture readings of 75 % RH or above. If substrates do have higher moisture levels. Prime the substrate with **R.S.Dampshield** (number of coats dependent on moisture content).

Existing Floors: Remove all dirt, oil, grease or other surface contaminants, preferably by shot blasting, scarification or mechanical planing, Fats, oils or greases must be removed by mechanical abrasion and detergent washing.

All local repairs should be carried out using **Resupatch** or similar.

Priming

Porous substrates such as concrete should be primed with **Resuseal WB Clear Primer**. **Resuprime** should be used where a thicker primer coat is required for greater film thickness.

Application

The ambient temperatures of the areas should not be allowed to fall below 10°C throughout the application and the curing period, as this could have an adverse effect on the appearance and colour of the system. Surface temperature must be above 5°C.

Where possible it is recommended that the application area is heated to a minimum temperature of 15°C to allow the ambient and substrate temperature to stabilise prior to installation.

Mixing: Pre-mix the base component to a uniform colour then mix the entire contents of the base with the hardener. If a separate mixing bucket is being used mix thoroughly ensuring all contents of both components are removed from the buckets supplied. Mix using a slow speed electric mixer for approximately two minutes or until the two components have fully combined.

The mixed unit should be applied immediately by roller or brush with a consistent procedure. Floor areas should be cross-rolled to ensure even application and to minimise roller marks.

Coverage rates will depend on porosity of the substrate.

Results from CAPSIS independent testing

A) WATER VAPOUR PERMEATION

Tested to ASTM E96-80, water transmission of materials - desiccant method. Average permeability value - $2.38 \times 10^{-3} \text{g/mm/h/m}^2/\text{mm Hg}$.

B) LINEAR CO-EFFICIENT OF THERMAL EXPANSION

Extension rod dilatometry method - 15°C - 30°C. Co-efficient of thermal expansion for the above temperature interval - $7.5 \times 10^{-5} \text{°C}$.

C) HARDNESS MEASUREMENT

Tested to ASTM D.2240-85 with Shore D Durometer. Average result from readings - 50.5 Shore D.

D) ADHESION TESTING

Tested to BS.3900 Part E.10.

(Pull off method), using Elcometer Model 106 adhesion tester. Lift force of pull-off readings - 233 psi.

E) TABER ABRASION

Tested to ASTM D.4060 (Taber method) using a CS17 abrasive wheel at 1000g. load for 1000 revolutions. Total weight loss - 79 micrograms.

F) IMPACT RESISTANCE

Tested to BS.3900 Part E7. (falling weight impact method). Average result obtained from 20 measurements - 154 micrometres

Category Guide

FeRFA Category : 2

Technical Information

The following figures are obtained from laboratory tests and our experience with this product .

Slip Resistance Dry > 60

Method BS7976 pt1-3 2002

Wet Please consult RSL

The slip resistance of a floor surface can vary as a result of the installation process, conditions at the time of application and subsequent traffic. Inappropriate cleaning or maintenance can adversely affect the performance. For further advice on potential wet areas please consult RSL.

Abrasion Resistance

Loss = 79 micrograms

Method BS8204 /ASTM D4060

Temperature Resistance

Tolerant of sustained temperatures of up to 150°C

Chemical Resistance

Excellent Chemical Resistance
Consult RSL for further details

Compressive Strength

n/a

Flexural Strength

n/a

Tensile Strength

n/a

VOC

440g/l

Calculation based on a full mixed unit

Life Expectancy

4 years plus

Subjected to Industrial Traffic

RSL terms and conditions will apply

Maintenance and Cleaning

RSL recommend that **Resutile** should be cleaned with a regular industrial cleaning regime with a floor scrubber utilising **R.S. Industrial Floor Cleaner** or similar with dirty water being removed. Isolated localised cleaning can be carried out using **R.S. Tyre Mark Remover**, **R.S. Fats and Grease Remover** & **R.S. Oil Remover**. All surfaces should be thoroughly rinsed with clean water after the use of chemical cleaners.

Please refer to the RSL Guide to Cleaning of Resin Floors

Health and Safety

Resutile is formulated from materials designed to achieve the highest level of performance as safely as possible. However, specific components require proper handling and suitable equipment, this information is given in the relevant safety data sheets. In all cases, spillages or skin contamination should be cleaned as soon as practically possible, by dry wiping of the affected area, and thorough washing with soap and water.

The information given in this data sheet is derived from tests and experience with the products and is believed to be reliable. The information is offered without guarantee to enable purchasers to determine for themselves the suitability of the product for their particular application. Any specification or advice given by Resin Surfaces Limited or its agents is based on the information supplied by the purchaser. Resin Surfaces Limited cannot be held accountable for errors or omissions as a result of that information being incorrect or incomplete. No undertakings can be given against infringement of patents. Some materials are derived from natural sources. As such some variation may occur. Site conditions may also contribute to variation in finish and colour.