



Pot Life: 45-50 mins

RG R2T

EN 13888 EN 12004

A two part epoxy resin grout for joints 1 to 10mm, suitable for use with all types of ceramic, porcelain and natural stone tiles in interior and exterior applications.

- ▼ For joints from 1 -10 mm wide
- ▼ Good acid and stain resistance
- ▼ Antibacterial and mould resistant
- ▼ Impervious to water and most water-based fluids
- ▼ Resistant to freeze/thaw cycles
- ▼ Good application and wash-off properties
- ▼ Smooth surface texture
- ▼ Resistant to chemical and mechanical aggression
- ▼ For interior, exterior and submerged applications
- ▼ Suitable for use with underfloor heating
- ▼ Fulfils the requirements of EN 13888, RG and EN12004 R2T
- ▼ For complimentary silicones see Validus Finem Silicone range

STORAGE:

The product must be stored unopened and sealed, in its original packaging in a cool, dry place.

SHELF LIFE:

Approximately 24 months.
Expiry date: See Best Before date printed on the top of the packaging.

TECHNICAL FEATURES:

Validus Resino is a two part epoxy resin grout for joints 1 to 10mm.

It is suitable for use with all types of ceramic, porcelain and natural stone tiles in interior and exterior applications.

M40 SPECIFICATION CLAUSE FOR CONTRACTS:

Floor and wall coverings must be applied and grouted with a epoxy, antibacterial, flexible, mould resistant, water-repellent adhesive/grout certified and tested in accordance with EN 13888 class RG and EN12004 class R2T with deformation higher than 10 mm, such as Resino by Validus.





SUITABLE SUBSTRATES OR USES:

- ▼ All types of porcelain, ceramic and natural stone tiles*
- ▼ All types of mosaics including glass
- ▼ Internal and External use
- ▼ Bathrooms, Kitchens and Living Areas
- ▼ Wetrooms and Showers
- ▼ Saunas, Spas and Thermal Areas
- ▼ Swimming Pools

Always test the product first to establish that the outcome is visually acceptable.

** Contact Validus before grouting absorbent tiles.*

CONSUMPTION:

As a grout: Varies depending on tile size - see table.

As an adhesive: 2.5 - 5 kg/m².

PRODUCT PREPARATION:

Mix both Validus Resino parts A & B together entirely in the original packing, with a mixer at a low speed (300-500 rev/min) until you achieve grout of a smooth and lump free homogeneous consistency.

Use protective gloves and glasses when mixing the product as Part B is irritant to skin.

Product that has begun to set must be discarded.

Use within the products pot life (As a guide 45-50 minutes at 23°C and 50% RH).





INSTRUCTIONS FOR USE AS A GROUT:

Before applying Validus Resino, ensure that the tiles have been laid correctly and are secured to the substrate. Ensure that the tile adhesive has set, and that the substrate is perfectly dry and free from any rising damp. Substrates must be properly fixed and free from movement.

Grout joints must be clean and dry, free from dust and should have a uniform depth of at least two thirds of the overall thickness of the tile to avoid any variation in colour.

Grout joints in accordance with BS 5385, parts 1-5 and the follow the recommended waiting time indicated on the relative Validus data sheet for the adhesive used.

Please note that some ceramic tiles may be micro-porous or have roughness of surface. It is advisable to carry out a preliminary test to verify that it can be cleaned. If necessary, apply a pore sealer on the surface to mitigate staining.

Always test the product first to establish that the outcome is visually acceptable.

Validus Resino should be applied evenly to the grout lines on the tile covering using a rubber grout float or spreader.

Application in a diagonal movement across the joints will achieve the best results. Grout material must completely fill joints.

Remove the bulk of surface grout material immediately, ensuring no more than a film or haze is residual on the tile. The time between grouting and final cleaning can vary depending on temperature and site conditions.

In ideal conditions (23°C and 50% RH) grouted areas can accept light foot traffic after 24 hours. The area can be returned to full service within 48 hours, after checking that Validus Resino has hardened completely.

Do not use Validus Resino when the temperature is below 12°C. Protect the grouted surface from strong sunlight, airflows, strong wind and high relative humidity.





INSTRUCTIONS FOR USE AS AN ADHESIVE:

Substrates must be properly fixed and free from movement.

Spread with a notched trowel. Bed tiles into adhesive, ensuring full coverage of adhesive between tile and substrate.

In ideal conditions (23°C and 50% RH) floors can be walked on with caution after about 24 hours for grouting. The area can be returned to full service within 4 days.

Do not use Validus Resino when the temperature is below 12°C.

CLEANING:

For the best possible outcome, a two-person teams should work together to apply and clean epoxy grout joints in a timely manner.

Immediately start the cleaning process.

Use circular movements, taking care not to damage the joints. Using a emulsifying pad, such as Vileda White Pad, clean across the joints, applying water evenly over the tiles. Wiping the joints diagonally helps to reduce hollowing of the joints below desired fill level. Rinse the emulsifying pad frequently to remove the excess grout.

Finally, remove any remaining residual material with a soft cellulose sponge. Rinse frequently in fresh water.

The following day for a final clean, apply Validus Resino Cleaner to the tiled floor and leave for 15 minutes. Emulsify the product with Vileda White Pad, a and wipe clean the floor with a soft dry cloth.





NOTES AND RECOMMENDATIONS:

- ▼ Although more deformable compared to cementitious grout, Validus Resino is not an elastic product so for interior floor areas, expansion joints must be considered.
- ▼ Expansion joints must be filled with silicone Validus Finem or a similar polyurethane sealant, removing all material that may affect the adhesion strength before the application.
- ▼ During the first 24 hours, always protect the finished and grouted area from strong sunlight, wind and rain.
- ▼ Protect all the areas which are not to be treated.
- ▼ Do not use Validus Resino when water is inside the joints to be grouted or when residual cement, oil or dust is on the tile surface.
- ▼ Contact Validus before grouting absorbent materials with Validus Resino.
- ▼ Do not wash Validus Resino with acid substances or strong oxidants during application as this may inhibit the hardening process of the material.
- ▼ Avoid standing cleaning water on the fresh grout joints.
- ▼ The prolonged contact with acid or oxidant products may modify the colour of grouting.





TOOL CLEANING:

Tiling and tools should be cleaned with damp sponge or cloth while the adhesive is still fresh. Hardened product can be cleaned by mechanical abrasion.

STORAGE:

The product must be stored unopened and sealed, in its original packaging in a cool, dry place.

SHELF LIFE:

Approximately 24 months. Expiry date: See Best Before date printed on the top of the packaging.

PACKAGING:

Validus Resino is packed and sold in 2.5kg buckets.

PLEASE NOTE:

Validus Aspecto complies with the requirements of Reg. (CE) N. 1907/2006 (REACH) - All. XVII, 47.

Use of the product beyond the declared shelf life may increase the risk of an allergic reaction.

If you are unsure with any of our instructions, please consult our **Technical Department on 020 8778 9000.**

The information contained in this technical data sheet is given voluntarily and in good faith. It is to the best of our knowledge true and accurate; however it may contain information which is inappropriate under certain conditions of use. The company cannot accept responsibility for any loss or damage due to inappropriate use or possibility of variations of working conditions and of workmanship outside our control.





product technical specification

Classification	EN 13888 RG and EN 12004 R2T
Consistency	Part A: Doughy. Part B: Dense liquid
Colours	See table
Specific Weight	Part A: 1.65 kg/litre. Part B: 0.95 kg/litre
Danger of Toxicity	Part A: The product may cause irritation to the eyes and skin. May cause sensitization Part B: caustic and toxic for contact with skin, ingestion and inhalation. May cause sensitization
Inflammable	No
Mixture Ratio	Part A : Part B = 94:6
Mixing Time	2-3 minutes (mixer @ 300 - 500 rpm)
Consistency of Paste	Doughy
Mass volume of Paste	1.40 kg/litre
Pot Life	45 minutes at + 23°C
Application Temperature	From + 12°C to + 30°C
Width of Joint	From 1 to 10 mm
Foot Traffic After	After 24 hours*
Full Service	After 24 hours*
Final Hardening	14 days*
Humidity Resistance	Excellent
Aging Process Resistance	Excellent
Resistance to Oil	Good
Resistance to Chemical Agent	Excellent
Resistance to Alkali	Excellent
Final Performance	
Shear resistance at start	> 2.0 N/mm ²
Shear resistance after water immersion	> 2.0 N/mm ²
Shear strength after thermal shock	> 2.0 N/mm ²
Deformability according to EN 12004	> 5 mm
Resistance to temperature	From - 20°C to + 100°C

*at 23°C and 50% relative humidity



final performance

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Shear resistance after water immersion	> 2.0 N/mm ²
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Resistance to temperature	From - 20°C to + 100°C



consumption table (kg per 10m² tiled surface)

Size of the tile (cm)	Thickness (cm)	Width of Joint (mm)						
		2	3	4	5	6	8	10
1x1	0.3	18.4						
2x2	0.4	11.5						
2.5x2.5	0.4	9.20	13.8					
2.5x2.5	1.0	23.6	35.4					
5x5	0.4	5.20	7.90	10.5	13.1	15.7	21.0	26.2
10x10	1.0	6.60	9.80	13.1	16.4	19.7	26.2	32.8
10x10	0.6	3.90	5.90	7.90	9.80	11.8	15.7	19.7
12.5x12.5	1.0	5.20	7.90	10.5	13.1	15.7	21.0	26.2
10x20	0.8	3.90	5.90	7.90	9.80	11.8	15.7	19.7
15x15	1.4	6.40	9.60	12.9	16.1	19.3	25.7	32.1
15x15	0.8	3.70	5.50	7.30	9.20	11.0	14.7	18.4
24x11.5	1.2	5.50	8.30	11.0	13.8	16.5	22.0	27.6
24x11.5	2.0	9.20	13.80	18.4	23.0	27.6	36.7	45.9
20x20	1.4	4.60	6.90	9.20	11.5	13.8	18.4	23.0
20x20	0.8	2.60	3.90	5.20	6.60	7.90	10.5	13.1
20x25	0.8	2.40	3.50	4.70	5.90	7.10	9.40	11.80
25x25	1.0	2.60	3.90	5.20	6.60	7.90	10.5	13.1
25x33	1.0	2.60	3.90	5.20	6.60	7.90	10.5	13.1
30x30	1.5	3.90	5.90	7.90	9.80	11.8	15.7	19.7
30x30	0.8	2.10	3.10	4.20	5.20	6.30	8.40	10.5
30x5	1.0	7.90	11.80	15.7	19.7	23.6	31.5	39.4
33x33	0.8	2.10	3.10	4.20	5.20	6.30	8.40	10.5
40x40	1.0	2.00	3.00	3.90	4.90	5.90	7.90	9.80
30x60	1.0	2.00	3.00	3.90	4.90	5.90	7.90	9.80
60x60	1.0	1.30	2.00	2.60	3.30	3.90	5.20	6.60



chemical resistance

Product			Intended Use	
Industrial Floors				
Group	Name	Concentration	Continuous Contact 20°C	Occasional Contact 20°C
Acids				
	Acetic	2,5% 5% 10%	+ (+) -	+ + -
	Chloric	37%	(+)	+
	Chromic	20%	-	-
	Citric	10%	-	-
	Formic	2.5% 10%	+ -	+ -
	Lactic	2.5% 5% 10%	+ (+) -	+ + (+)
	Nitric	25% 50%	(+) -	+ -
	Oleic		-	-
	Phosphoric	50% 75%	(+) -	+ -
	Sulphoric	1.5% 50% 98%	+ (+) -	+ + -
	Tannic	10%	(+)	+
	Tartaric	10%	+	+
	Oxalic	10%	+	+
Alkalis and Saturated Solution				
	Ammonia	25%	+	+
	Sodium Hydroxide	50%	+	+
	Potassium Hydroxide	50%	+	+
	Hypochlorite		(+)	+
	Active Chlorine	6.5 g/l 162 g/l	-	-
Saturated Solution				
	Sodium Thiosulphate		+	+
	Sodium Chloride		+	+
	Calcium Chloride		+	+
	Iron Chloride		+	+
	Aluminium Sulphate		+	+
	Sugar		+	+



chemical resistance continued

Group	Name	Concentration	Continuous Contact 20°C	Occasional Contact 20°C
	Hydrogen Peroxide	1% 10%	+ +	+ +
	Sodium Bisulphate		+	+
Oils and Combustibles				
	Gasoline		+	+
	Oil		+	+
	Diesel		+	+
	Olive Oil		+	+
	Ethyl Alcohol		+	+
	Acetone		-	-
	Ethylene Glycol		+	+
	Glycerine		+	+
	Perchloroethylene		-	-
	Trichlorethane		-	-
	Trichloroethylene		-	-
	Methylene Chloride		-	-
	Toluene		-	-
	Benzol		-	-
	Xylol		-	-

KEY:

+ = Excellent Resistance

(+) = Decent Resistance

- = Poor Resistance

Values based on ceramic walls grouted with Validus Resino.



product colour chart

Colour	RAL Code	Stock Code
Pure White	9010	7750
Telegrey	7047	7751
Light Grey	7035	7752
Traffic Grey	7042	7753
Pebble Grey	7032	7754
Stone Grey	7030	7755
Dusty Grey	7037	7756
Signal Black	9004	7757
Oyster White	1013	7758
Cream	9001	7759
Light Ivory	1015	7760
Ivory	1014	7761
Sand Yellow	1002	7762
Brown Beige	1011	7763
Beige	1001	7764
Fawn Brown	8007	7765
Nut Brown	8011	7766
Chocolate Brown	8017	7767
Lemon Yellow	1012	7768
Pastel Green	6019	7769
Traffic Green	6024	7770
Signal White	9003	7771
Light Blue	5012	7772
Cobalt Blue	5013	7773
Antique Pink	3014	7774
Pearl Pink	3033	7775



product health and safety information

CLP REGULATION (EC) NO 1272/2008:

DANGER



PART A

HAZARD STATEMENTS:

H412: Harmful to aquatic life with long lasting effects.

H319: Causes serious eye irritation.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of water.

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

EUH205: Contains epoxy constituents. May produce an allergic reaction

Reaction product: bisphenol-A-(epichlorhydrin) (MW < 700); Bisphenol-F-epichlorhydrine/epoxy resins; Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

PART B

HAZARD STATEMENTS:

H412: Harmful to aquatic life with long lasting effects.

H319: Causes serious eye irritation.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of water.

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

Contains Tetraethylenepentamine, Triethylenepentamine.

Follow instructions in the material safety data-sheet for safe handling and use.

Technical Data Sheet Version Number: VA.RO.T01

The information contained in this technical data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.