

TECGRIP CAS VINYL ESTER

Product Codes

TGR 54, Packaging listed overleaf

Description

A new generation single shot resin anchor cartridge with exceptional performance characteristics in different environments. No special guns required - use a good quality standard mastic gun. Light coloured resin mixes with dark grey hardener paste to form a mid grey finished product. For use in holes with 1 to 4 mm annulus.

Advantages

- *310ml standard cartridge.
- *Use in wet/damp but clean holes.
- *Use in both cored and rough holes.
- *Rapid setting and hardening.
- *Rapid return to work even at low temperatures.
- *Excellent chemical resistance.
- *No expansive forces on substrates.
- *Use in all orientations.
- *Up to 50 year working life of anchor.
- *Suitable for Underwater Applications

Uses

- *Anchoring of starter bars.
- *Anchoring of threaded rebar, threaded rod and studs into suitable strong substrates.
- *Wall ties.
- *Brackets.
- *Base plate and rail track anchoring

Specification Outline

Anchoring shall be carried out using Tecgrip CAS Vinyl Ester as supplied by Parex Ltd. The product must be stored, handled and used strictly in accordance with the suppliers instructions.

Quality and Environmental Assurances

Parex Ltd is a firm of Assessed Capability whose quality and environmental management systems conform to EN ISO 9001 and EN ISO 14001 respectively assessed by UK CARES LTD.



Standards

Tecgrip CAS Vinyl Ester has been tested in accordance with the appropriate parts of BS 6319, BS 5080 and ETAG001-5 options 1 and 7.

Physical properties

Compressive strength at 20°C

1 Hour	2 Hour	24 Hours	7 Days
20N/mm ²	30N/mm ²	60N/mm ²	75N/mm ²

Flexural strength at 7days	28N/mm ²
Tensile strength at 7days	13N/mm ²
Bond strength (concrete)	>2N/mm ²
Density	1650kg/m ³

Setting times

-10°C	0°C	10°C	20°C	30°C
60 mins*	35 mins*	14 mins	6 mins	4 mins

*Resin temperature must be at least 20°C

Performance Information for Specification

Please consult the Tecgrip CAS Vinyl Ester Specification Guide for performance information including pull out information, shear loading and reduction factors etc.

Anchor design

Parameters controlling the ultimate anchor strength (uniaxial pull out load) include.

- *Type, age and strength of substrate
- *Length of resin anchor bond.
- *Hole forming method
- *Type of bolt or bar.
- *Environment.
- *Edge distance.
- *Anchor to anchor distances.

Parex Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Parex Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Parex Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.

TECGRIP CAS VINYL ESTER

Typically for a rough sided hole a uniaxial pull out load of one tonne per 25mm of embedment may be achieved (disregard the first 50mm in the calculation). In practice a safety factor must be used:

Non critical applications S/Factor=1.5min

Critical applications S/Factor=2.0min

Any relevant codes of practice or standards should be conformed to. For best performance the anchor distances below should be followed.

Anchor to anchor distance 2.5X the embedment.

Anchor to edge distance 1.5X the embedment.

Hole Preparation

HOLES MUST BE CLEAN.

Holes should preferably be drilled on either air or water flush. Rotary percussive drilled holes not flushed should be cleaned using a rotary steel brush together with a vacuum cleaner extension or blown out from the bottom of the hole. Diamond cored holes may be under reamed or roughened as deemed necessary by the engineer. Nearby prepared holes must be protected from debris from the ongoing preparation process. Steel bars used for anchoring should be deformed such as those manufactured to BS4449. Threaded bars may also be used but must be cropped or flattened slightly to prevent unscrewing from the hardened resin. Contact Parex Technical Team if using smooth bars.

Bar Placing

Place the cartridge into the gun. Remove the cap and screw on the mixer nozzle. Start to pressurise the cartridge and dispose of the first inch or so of material until an even grey colour is achieved – release the pressure,

Place the mixing nozzle to the back of the hole (use an extension piece if necessary) and fill about $\frac{3}{4}$ of the hole depth. Insert the fixing by gently agitating and twisting to remove any entrapped air. Mixed resin should just overflow from the mouth of the hole. Adjust quantities for the next and subsequent holes. THE BAR SHOULD NOT BE DISTURBED UNTIL THE RESIN HAS SET

For further information and sales please contact Parex Ltd below:

Yield

Typical no. of fixings per 300ml cartridge

Bolt dia.	Hole dia.	Hole depth	Max no. of holes
12	14	110	27
16	20	125	7
20	24	150	3

Limitations

Tecgrip CAS Vinyl Ester is a fast cure product and may not be suitable for large anchor installations where more than one cartridge is required. Refer to products such as Tecgrip V or H or the Parex Technical Team.

These products may be placed at temperatures from -10 to +35°C. Use in structural situations above 60°C is **not** recommended.

Health and Safety

This product is resin based. Resins and solvents may cause allergic reactions in some people. Use barrier cream on exposed areas of arms and wear gloves and eye protection when mixing, using and cleaning. This product is styrene free however prolonged use in closed, unventilated areas is not recommended.

Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. If swallowed do not induce vomiting.

Seek medical advice immediately. FOR FULL HEALTH AND SAFETY DATA REFER TO PRODUCT HEALTH AND SAFETY DATA SHEET –available on line at www.parex.co.uk

Packaging, Ordering and Storage

Tecgrip CAS Vinyl Ester is available in 300ml cartridges in boxes of 15 complete with 15 nozzles. Individual items can be ordered as follows:-

Tecgrip CAS Cartridge Vinyl Ester	TGR 54
Tecgrip CAS Nozzle Mixer	TGR 30
Tecgrip CAS Vinyl Ester Gun	TGR 57
Tecgrip CAS Extension Tube	TGR 33

Store in dry, light free conditions at a temperature of between 5 to 25°C.

Shelf life is 12 months from the date of manufacture.