

Product Code: EFLEX-RAPID**TECHNICAL DATA SHEET**

Liquid Rubber RAPID

Description

EFLEX Liquid Rubber Rapid is a tough and flexible epoxy compound with a fast work time which sets to a hard, smooth rubber in under 5 minutes. It is used to repair areas of wear or damage on rubber equipment including conveyor belts, creates abrasion resistant and noise reducing linings, and encapsulates parts. Liquid Rubber Rapid can also be used to fill expansion joints, cast rubber components, and make flexible moulds and patterns.

It is low in viscosity, resulting in a system with excellent adhesion properties. Thanks to its formulation, Liquid Rubber Rapid has none of the problems associated with filled polyurethane systems, such as sedimentation and moisture sensitivity. It sets to a black colour to appear uniform with rubber.

Applications

- Repairing old and worn rubber equipment and parts, including conveyor belts.
- Filling expansion joints.
- Coating against wear, corrosion and abrasion.
- Reducing noise on chutes and other processing equipment subject to intense vibrations.
- Encapsulation of electrical components and other parts to protect against mechanical or water influence.
- Casting rubber parts and making flexible moulds and patterns.



Advantages

- Fast working for making quick repairs.
- Low viscosity makes it easily pourable and allows it to flow into intricate units.
- Excellent adhesion with very low shrinkage.
- High abrasion resistance and tensile strength.
- Excellent chemical stability and electrical properties.

Packaging

Product Code

EFLEX-RAPID-500g

EFLEX-RAPID-4x500g

Pack Size

500g Kit (250g Part A, 250g Part B)

4 x 500g Kits (250g Part A, 250g Part B)

Health & Safety

Liquid Rubber Rapid consists of epoxy resin and hardener systems. Wear eye protection and rubber or plastic-coated gloves when handling. Wash hands with soap and water immediately after use. Please consult the individual Material Safety Data Sheet for more information.

Storage

Liquid Rubber Rapid should be stored out of direct sunlight in dry frost-free conditions of temperatures between 15°C and 20°C. Under such conditions shelf life will be 2 years from the date of manufacture.

Technical Data

Shelf life	24 months from date of manufacture
Mix ratio (weight + volume)	1:1
Working time (200g)	5 minutes at 25°C
Tack free time	30 minutes at 25°C
Light service	2 hours at 25°C
Regular service / Full cure	24 hours at 25°C
Application temperature	+5°C to +35°C
Temperature resistance	
Wet	65°C
Dry	90°C
Shore A hardness (full cure)	89
Tear resistance	27 N/mm
Tensile strength	25 MPa
Elongation at break	300%
Linear shrinkage	0.1%
Abrasion resistance	75 mm ³
Non-volatile content	100%

Typical properties: for information only; not for specification purposes.

Directions For Use

Surface Preparation Metal

- Thoroughly clean the application area of oil, grease and dirt using **Sylmasta Non-Flammable Degreaser**.
- Roughen surfaces by abrasive blasting with 24-40 grit to create a good surface profile. Alternatively, use a 60 grit or coarser sandpaper or sanding disc and ensure substrate is back to bright metal.
- Make the repair as soon as possible after surface preparation to avoid oxidation or rusting.

Surface Preparation Rubber

- Thoroughly clean the application area of oil, grease and dirt using **Sylmasta Non-Flammable Degreaser**.
- Roughen surfaces by sanding the rubber with a 16 or 24 grit open coat sanding disc or sandpaper to produce a good surface profile. Ensure that all oil and contaminants are completely removed from the rubber.

Surface Preparation Concrete

- Concrete repairs require multiple cleaning due to its porous nature.
- Degrease and rinse the application area, preferably using a power washer or steam cleaner
- Allow the area to thoroughly dry before application.

Mixing Liquid Rubber Rapid

- Add Part B to Part A at a 1:1 ratio and stir vigorously for one minute. Ensure the bottom and sides of the container are thoroughly scraped for complete mixing. Use immediately as Liquid Rubber Rapid cures quickly.

Conveyor Belt Repairs

- Clean the area to be repaired.
- If the conveyor belt is torn or holed right through, apply masking tape to the underside.
- Pour Liquid Rubber Rapid into the hole or tear, ensuring a thickness of at least 3mm to provide sufficient strength.

Filling Expansion Joints

- Clean the joint to remove loose particles and ensure it is free from grease and oil.
- If the joint is more than 50mm deep, use sharp sand to fill the bottom of the joint to exactly halfway.
- Pour the mixed Liquid Rubber Rapid into the joint from one side and allow it to fill the entire area. This ensures air bubbles are minimised.
- Fill the joint to 1mm below the height of the concrete to prevent overfilling.

Mould and Patten Making

- Ensure the master and mould box are thoroughly cleaned. If wooden parts are used, ensure the wood is properly sealed.
- Liberally apply **Sylmasta Non-Flammable Release Agent** over the master and mould box to prevent Liquid Rubber Rapid from sticking.
- Brush a thin coat of Liquid Rubber Rapid over the master; this will help to prevent air bubbles.
- Fill the mould box with Liquid Rubber Rapid and allow to set.

Lining Applications and Noise Reduction

Liquid Rubber Rapid is suitable for applications requiring impact resistance; such as feeder bowls in production plants or chutes in cement, coal or other mining plants. Lining applications require a good coating depth for best results.

- Ensure the surface is thoroughly cleaned and abraded to provide a good key.
- Do not feather edge the repair surface. Instead, ensure the edge of the area being coated is slightly recessed with a defined butt joint. Failure to do this will allow the aggregate to undercut the cured Liquid Rubber Rapid.
- Apply Liquid Rubber Rapid with a brush to at least 1.5mm.
- Adding multiple layers of Liquid Rubber Rapid will build up a thicker, longer lasting coat with greater wear resistance.

Post Curing

Once fully cured, the repair can be ground flush using a 24 or 36 grit open coat sanding disc. Ensure the grinder is kept moving and do not overheat the work surface.

Disclaimer

Whilst all reasonable care is taken in compiling technical data on the Company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the customer's responsibility to satisfy themselves that each product is fit for the purpose for which they intend to use it, that the actual conditions of use are suitable and that in the light of our continual research and development programme the information relating to each product has not been superseded.