

# Syntech IC 55

# Fluid epoxy resin for reinforcing building structures



A two-component pure epoxy adhesive that is fluid with a low viscosity, free from fillers and solvents, being specific for high performance structural consolidation injections in crumbling masonry, degraded concrete, aging screeds and industrial flooring, cracked plasters and mortars and so on. It is ideal for securing bars, clamps and tie-rods. It is also perfect for the deep consolidation of wooden materials and other types of porous materials, with impregnation by brush or roller.

CUSTOMS CODE: 3907 3000 COMPONENTS: Two-components APPEARANCE: Liquid + Liquid AVAILABLE COLORS: Straw yellow

PACKAGING AND DIMENSIONS: Can 1 kg [A] - Can 5 kg [A] - Can 0.5 kg [B] - Can 2.5 kg [B] -

Kit: 1 Can 1 kg [A] + 1 Can 0.5 kg [B] - Kit: 1 Can 5 kg [A] + 1 Can 2.5 kg [B]

#### OBTAINED CERTIFICATIONS AND REGULATIONS





#### FIELDS OF APPLICATION

Reinforcing and filling injections of cracks in concrete, stone, brick, mixed works etc. Anchor, bonding and attachment of connectors, plates etc. Structural reinforcement and small volume rebuilding (only horizontal) in general. Reinforcement of porous construction materials such as wood, natural stone, bricks etc.

## **ALLOWED SUPPORTS**

Plasters - Concrete - Cement-based or lime-based mortars - Prefabricated concrete - Wood - Bricks - Tuff - Mixed walls (bricks and stones) - Stone walls - Floor screed - Rock walls

# PREPARATION OF SUPPORTS

The surfaces of application will be seasoned and dry (residual humidity measured at a depth of 4 cm, should not be greater than 4%), free from dust, grease, soiling, crumbling and non-adhering parts.



#### MODE OF USE

Make sure that the environment is well ventilated and wear the personal protective equipment mentioned in the safety data sheet. Add component B to component A taking care to remove all the material from the packaging, mix thoroughly with a mixer at a low number of revolutions, until a perfectly homogeneous mixture is obtained; add the required load amount (component C) continue to mix until a perfectly homogeneous lump-free mixture is obtained. Lay the material using the techniques specific to the type of intervention: injection, pouring, brushing, etc.. Do not apply on wet or pulverised media. Non-conformities of the support can have unpleasant drawbacks: detachments, large bubbles, etc. Apply only in the intended thermal intervention (+8/+35 °C). Use the product immediately after mixing and mix only the amount of product intended for immediate use. Syntech IC 55 is a product based on fluid epoxy resins. It may cause variations in the colour of the product on which it is applied, both wood and stone material. For this reason it is recommended to carry out preliminary tests.

#### APPLICATION METHODS

Pour out - Injection - Brush - Paint roller

## **TOOL CLEANING**

Thinner for resins

#### **KEY FEATURES**

■ Density: 1.1 kg/dm³

■ Shelf-life: 12 months

■ Use wearing protective gloves

Pot-life: 25 min

▼ Temperature of use: +5 / +35 °C

## **TECHNICAL SPECIFICATIONS**

< 3 %

EN 196

Flexural strength 45 N/mm<sup>2</sup>

UNI EN 12614

Glass transition temperature 50 °C

ISO 178

Static elastic modulus 3000 N/mm²

FN 177

Injectability in dry sand columns  $\bf 190\ s$ 

UNI EN 1881

Resistance to the extraction of the steel bars with improved adhesion

0.1 mm

EN 1771

Injectability in wet sand column  ${\bf 190}~{\bf s}$ 

Dry residue 100 %

Working temperature -20/+60 °C

a 25°C

Viscosity 450 / 550 mPas

a 20°C

Complete hardening at 20°C 7 day

in peso

Ratio of catalysis A : B = 100 : 50 %

a 20°C

Touch hardening at 20°C 6-8 h

UNI EN 12190

Compressive strength > 70 N/mm<sup>2</sup>

## CONSUMPTION

Approximately 1.1 kg of SYNTECH IC55 for each cubic decimetre of volume to be filled.



# STORAGE AND CONSERVATION

Protect from freezing. Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Store the product at a temperature between  $+5^{\circ}$ C and  $+35^{\circ}$ C.

## **PHOTO GALLERY**







# **ADDITIONAL CONTENT**



## **WARNINGS AND PRECAUTIONS**

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge. Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage. Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: www.azichem.com. The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: www.azichem.com.

It is forbidden to dispose of the product and/or packaging in the environment.

