ACRIFIX[®]

Technical Information

ACRIFIX® TH 0032

Thinner for all 2-component polymerization adhesives curing with the aid of ACRIFIX® CA 0020

Product and Use

Туре

Methyl methacrylate containing activator; colorless, thin-bodied

Applications

Thinner for all 2-component polymerization adhesives curing with the aid of ACRIFIX® CA 0020, e.g. ACRIFIX® 2R 0190. Preferentially used when over 10% thinner is added.

Storage/Transport

Keep container tightly closed in a cool place. UN 1247

Working Instructions

The viscosity of the adhesives is adjusted so as to allow their direct use in most cases. However, for certain applications it is helpful to dilute the adhesives beforehand, i.e. to reduce their viscosity:

• More rapid degassing because air bubbles rise to the surface quicker in diluted adhesive – advantageous for large quantities of adhesive composition.

• Better leveling, thinner adhesive layers and somewhat delayed skin formation - advantageous for bonding large surfaces (particularly of thin sheets).

• Better wetting out and degassing when embedding fiber mats and woven fabrics.

• More rapid filling of butt joints between thick blocks.

• Diluted adhesives enable shorter pot lives and polymerization times (at higher hardener

concentration), because degassing and processing can be performed more quickly than with undiluted polymerization adhesives. The viscosity required for a specific application must be determined by trial and error. In general, adhesives should be diluted as little as possible. The hardener concentration (e.g. ACRIFIX® CA 0020) depends on the quantity of diluted adhesive.

The influence of the thinner on viscosity and polymerization can be seen in the corresponding pictures.

Other Measures

ACRIFIX® TH 0032 is **polymerizable** on its own after adding 3 to 6% ACRIFIX® CA 0020. The polymers are clear and yellowish. Polymerization shrinkage increases with higher thinning. In case of strong thinning, surface structures may occur after curing as well as a stronger yellow color. ACRIFIX TH 0032 is not suited for surface cleaning. For more information see our Guideline "Joining, Ref. No.: 311–3".

Limitation of Liability

Our ACRIFIX[®] adhesives and other service products were developed exclusively for use with our PLEXIGLAS[®] products and are specially adjusted to the properties of these materials. Any recommendations and guidelines for workshop practice therefore refer exclusively to these products. Claims for damages, especially under product liability laws, are ruled out if made in connection with the use of products from other manufacturers.

For further information on safety measures, the exclusion of health risks when handling adhesives and on their disposal, see our Safety Data Sheet.

Availability according to the current sales range

Typical Values of Properties

Properties	Values
Viscosity; Brookf., II/6/20 °C	~0.6 mPa · s
Density (20 °C):	~0.94 g/cm3
Refrative index nD ^{20:}	~ 1.415
Color	colorless to yellowish, clear
Boiling point	~ + 100 °C
Flash point; DIN 51755	~ + 10 °C
Explosion limits in air	2.1 to 12.5 Vol.%
Storage stability:	2 years after filling, given correct storage
Storage temperature:	Max. 30 °C
Packaging materials:	aluminum, colored glass
	Max. 30 °

Safety Measures and Health Protection

Labeling according to (EC) 1272/2008 **Danger**, contains methyl methacrylate, N,N-bis-(2-hydroxyethyl)-p-toluidine



Highly flammable liquid and vapour. (H225) Causes skin irritation. (H315) May cause an allergic skin reaction. (317) Causes serious eye irritation. (H319) May cause respiratory irritation. (H335) Keep away from heat/ sparks/open flames/hot surfaces. — No smoking. (P210) Avoid breathing dust/fume/gas/mist/vapours/ spray. (P261) Wear protective gloves/protective clothing/eye protection/ face protection. (P280) IN CASE OF CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) Dispose of contents in accordance with local regulation. (P501)



Viscosity of ACRIFIX® 2R 0190

X = Thinner concentration

Y = Viscosity

Z = Efflux time/6mm cup



Influence of thinner concentration on polymerization time of ACRIFIX® 2R 0190 + 3% ACRIFIX® CA 0020 (on diluted adhesive)

- X = Polymerization time
- Y = Thinner-concentrate
- A = ACRIFIX[®] TH 0032
- B = ACRIFIX® TC 0030

• = registered trademark PLEXIGLAS and ACRIFIX are registered trademarks of Evonik Röhm GmbH, Darmstadt, Germany. Evonik Röhm GmbH is certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment).

Evonik is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, also with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Evonik Performance Materiasl GmbH

Acrylic Polymers

Kirschenallee, 64293 Darmstadt, Germany info@plexiglas.net www.plexiglas.net

www.evonik.com

Ref.-No. 391-41 September 2015

