

Technical data sheet



Product: 3463

Manufacturer: HENKEL KGAA

Product group: KLEBSTOFF

Article group: 2-K KLEBSTOFF

Download: 26.04.2025

LOCTITE® EA 3463

This data sheet was provided to you by Tewipack Uhl GmbH. The company tewipack Uhl GmbH assumes no responsibility for the topicality and the Accuracy of the information contained. The properties of the products can vary due to various influences such as composition and condition of the Substrate, impurities in or on the substrate, temperature and humidity at the Change storage and environmental conditions during use. Using this product in combination with other material, the customer is responsible for to check through our own tests whether the product is suitable for the planned combination and whether this combination delivers the expected results

Tewipack Uhl GmbH
Industriestraße 15
D-75382 Althengstett

Telephone:
+49(0)7051/9297-0
Fax:
+49(0)7051/9297-99

E-Mail:
info@tewipack.de
Website:
www.tewipack.de

Managing director:
Alexander Uhl,
Michael Uhl
HRB 330424
Amtsgericht
Stuttgart

Bank details:
Sparkasse
Sindelfingen
Pforzheim
Calw
BLZ 666 500
85
Konto 17 787

Commerzbank
Sindelfingen
BLZ 603 400 71
Konto 8 001 166

Vereinigte
Volksbank AG
Böblingen
BLZ 603 900 00
Konto 80 089
003

Postbank
Stuttgart
BLZ 600 100
70
Konto 146
294 708

LOCTITE® EA 3463

March 2021

PRODUCT DESCRIPTION

LOCTITE® EA 3463 provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance (Resin)	Paste grey
Appearance (Hardener)	Paste black
Appearance - Mixed	Metallic black
Components	Two components – resin & hardener
Cure	Room temperature cure after mixing
Application	Industrial maintenance
Application Temperature	15 to 30°C (59 to 86 °F)
Specific Benefits	<ul style="list-style-type: none"> • Cures under water and will adhere to most damp surfaces • Adheres to most types of clean surfaces • Cures in 10 minutes for fast repairs • Epoxy adhesive stick applies like putty and cures to a steel-like finish

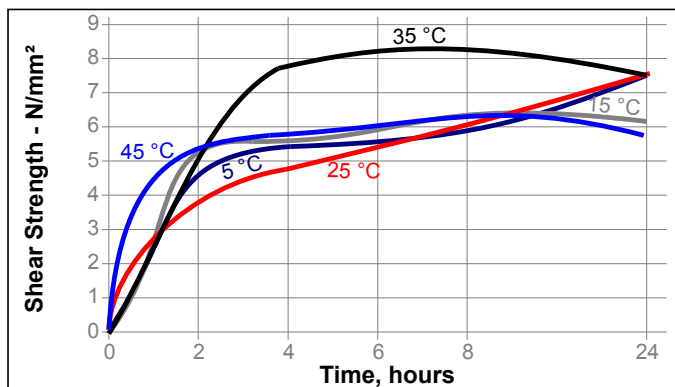
LOCTITE® EA 3463 is a two component steel filled epoxy resin system. It is ideal for restoring metal parts worn by mechanical and/or corrosion. It is applied like a putty and when cured it has a high compressive strength and good adhesion to most surfaces. Typical applications include stopping leaks in pipes and tanks, filling oversized bolt holes, smoothing welds, and repairing non-structural defects in castings holes in tanks.

TYPICAL CURING PERFORMANCE

Gel Time, ASTM D2471, minutes	3
Working life, @ 25 °C, minutes	4
Cure Time @ 25 °C, minutes	10

Cure Speed vs. Temperature

The graph below shows the shear strength developed with time on grit blasted mild steel lap shears at different temperatures and tested according to ISO 4587.



TYPICAL PERFORMANCE OF CURED MATERIAL

Cured for 1 week @ 23°C

Physical Properties

Glass Transition Temperature (Tg), °C	54
TMA, ISO 11359-2	
Shore Hardness, Durometer D	70
ISO 868	
Elongation, ISO 527-5, %	0.3
Tensile Strength	N/mm² 18.8
ISO 527-2	(psi) (2,700)
Tensile Modulus,	N/mm² 105
ISO 527-2	(psi) (15,000)
Compressive Strength,	N/mm² 50
ISO 604	(psi) (7,200)
Coefficient of Thermal Expansion, K ⁻¹	
ISO 11359-2	
Below Tg	29×10 ⁶
Above Tg	115×10 ⁶
Coefficient of Thermal Conductivity,	1.01
W/(m·K)	
ISO 8302	

Electrical Properties

Surface Resistivity, IEC 60093, ohms	46×10 ¹²
Volume Resistivity, IEC 60093, ohm-cm	110×10 ¹²

Adhesive Properties

Lap Shear Strength,	
ISO 4587	
Mild Steel (grit blasted)	N/mm² 3.8
	(psi) (550)

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Directions for use

Surface Preparation

Proper surface preparation is critical to the long-term performance of this product. The exact requirements vary with the severity of the application, expected service life, and initial substrate conditions.

Application

1. Caution: Do not apply to surfaces above 66°C (150°F).
2. Apply to clean and dry surface for best strength. LOCTITE® EA 3463 can be applied to wet surfaces, but bond



strength will be lower.

3. For maximum adhesion, clean and sand surface.
4. Use gloves; do not mix with bare hands.
5. Cut required amount of material from stick. Remove clear plastic wrapper from cut section.
6. To mix, first twist the material to produce a spiral pattern of resin and hardener. Next, knead material for 2 to 3 minutes or until a uniform color is achieved.
7. Firmly apply for patch, repair or bonding.
8. For a smooth finish, wet a cloth or gloved finger with water and smooth.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Product Specification

The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact a Henkel representative for related approval or certificate of this product.

Data Ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23 °C / 50% RH = 23±2 °C / 50 ±5% RH

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Disclaimer

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you

carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation or Henkel Canada, Inc. the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

