

LOCTITE® AA 3048™

January 2024

PRODUCT DESCRIPTION

LOCTITE® AA 3048 provides the following product characteristics:

Technology	Acrylic
Chemical Type	Modified Acrylic
Appearance, (Component A)	Clear Liquid ^{LMS}
Appearance, (Component B)	Light Brown Liquid ^{LMS}
Components	Two component - requires mixing
Viscosity	Low
Cure	Two part acrylic
Mix Ratio, by volume - Part A: Part B	1:10
Application	Bonding
Specific Benefit	Bonds low energy plastic without pre-treatments

LOCTITE® AA 3048™ is a high strength, fast fixturing two components acrylic adhesive system designed for bonding low energy plastics without surface pretreatment. This easy to use, 1:10 mix ratio product cures at room temperature, forming tough, durable bonds. LOCTITE® AA 3048™ is low odor, non-flammable, halogen and solvent free and will also bond metal, glass and a host of other plastics. This product requires no refrigeration.

TYPICAL PROPERTIES OF UNCURED MATERIAL Part A:

Specific Gravity @ 25 °C 0.99

Viscosity, Cone & Plate, 25 °C, mPa·s (cP): Cone CP25-2 @ shear rate 20 s⁻¹ 80,000 to 110,000

Flash Point - See SDS

Part B:

Specific Gravity @ 25 °C 1.01

Viscosity, Cone & Plate, 25 °C, mPa·s (cP): Cone CP25-2 @ shear rate 20 s⁻¹ 10,000 to 14,000

Flash Point - See SDS

Mixed:

Specific Gravity @ 25 °C 1.00

Working Time @ 25 °C, minutes

(maximum time before assembly): 10

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Fixture Time

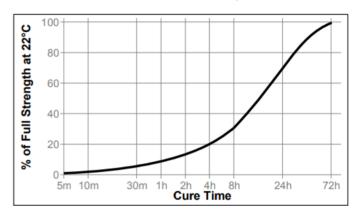
Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Fixture Time, ISO 4587, minutes:

HDPE <20 HDPE to Steel 10 to 15

Cure Speed vs. Time

The graph below shows the shear strength developed over time at $22 \,^{\circ}\text{C}$ / $50 \,^{\circ}\text{C}$ RH on HDPE and tested according to ISO 4587.



TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Cured for 72 hours @ 23 °C.

Shear Strength

Block Shear Strength, ISO 13445:

HDPE

N/mm² ≥12
(psi) (1,750)

N/mm² 9.5
(psi) (1400)

LDPE

* N/mm² 9.3

LDPE * N/mm² 9.3
(psi) (1350)
ABS N/mm² 12
(psi) (1800)
PVC N/mm² 11.5
(psi) (1690)

| Polycarbonate | Polycarbonat

* substrate failure



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:

- 1. For best performance bond surfaces should be clean and free from grease.
- 2. For more detailed information, please contact your local Technical Service Center or Customer Service Representative.

Storage

Store product in the unopened container in a dry location. Material removed from containers may be contaminated during use. Do not return liquid to original container. 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. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those recommended. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$ kV/mm x 25.4 = V/mil mm / 25.4 = inches μ m / 25.4 = mil N x 0.225 = lb N/mm x 5.71 = lb/in N/mm² x 145 = psi MPa x 145 = psi N·m x 8.851 = lb·in N·m x 0.738 = lb·ft N·mm x 0.142 = oz·in mPa·s = cP

Note

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.

