3M™ Scotch-Weld™ Epoxy Adhesive 2216, Gray, Part B/A, 1 Quart Kit, 6/case

3M Product Number 2216, 3M ID 7000000815, UPC 50021200203560,00021200203565 ★★★★☆ 4.3 (3)

Specifications Details Resources Reviews Support

Feedback

Hover over image to zoom in

VERSATILE USE: Adheres to a variety of similar and dissimilar substrates, including metals, masonry, wood, rubber, and most plastics

IDEAL INDUSTRIES: For use in the transportation, construction, general aerospace, and appliance repair industries

HIGH-STRENGTH: Creates a strong and long-lasting bond, holding up to environmental aging

View more details

Frequently viewed resources

Safety Data Sheet (PDF, 0B)

View all resources

For industrial/occupational use only. Not for consumer sale or use.

Change options

Container Size (Metric)	0.95 Liter
Container Size (Imperial)	1 Quart
Product Color	Gray
Set Time	8 - 12 Hours

Large Volume Order

Ask a 3M Expert

Specifications

Details

Adhesive Type	Epoxy
Application	Hard Disk Drive Component Assembly, Potting, Bonding, Large Surface Lamination Assembly, Small Joint Assembly, Sealing, Potting and Encapsulating
Application Temperature From (Celsius)	-55 ℃
Application Temperature To (Celsius)	80 ℃
Assembly Type	Potting & Encapsulating, Sealing, Small Joint Assembly, Large Surface Lamination
Brands	Scotch-Weld™
Container Size (Imperial)	1 Quart
Container Size (Metric)	0.95 Liter
Design Challenges	Noise Vibration & Harshness Control NVH, Impact & Shock Absorption
Flame Retardant	UL94 HB, UL94 HB
Full Cure Time	7 Days @ 72 F (22 C)
Hardness	50-65 Shore D
Indoor/Outdoor	Both
Industries	Construction, Consumer Goods, Electronics, General Industrial, Military & Government, Specialty Vehicle, Transportation, Metalworking, Signage, Woodworking
Maximum Operating Temperature (Fahrenheit)	350 ℉
Mix Ratio Volume Base:Accelerator	2 : 3
Open Time	90 min @ 72 °F (22 °C)
Physical Form	Flowable Liquid
Product Color	Gray
Product Form	Kit
Product Type	Epoxy Adhesive
Set Time	8 - 12 Hours
Shear Strength	3,200 psi
Shelf Life in Months (From Date of Manufacture)	24
Specific Gravity	1.3
Storage Temperature	72 Degree Fahrenheit
Storage Temperature (Celsius)	22℃
Units per Case	6.0
Viscosity	Self-leveling
Viscosity Range (cps) at Room Temperature	80000
Volume (Imperial)	1 qt
Volume (Metric)	0.95 L

Details

Highlights

VERSATILE USE: Adheres to a variety of similar and dissimilar substrates, including metals, masonry, wood, rubber, and most plastics

IDEAL INDUSTRIES: For use in the transportation, construction, general aerospace, and appliance repair industries

HIGH-STRENGTH: Creates a strong and long-lasting bond, holding up to environmental aging

HIGH-PERFORMANCE: Performs well in cryogenic bonding applications without becoming brittle

REPOSITION AND ADJUST: Offers up to 90 minutes of working time

FAST HEAT SETTING: At 200 °F (93 °C), a full cure can be accomplished in 30 minutes

KEY SPECIFICATIONS: Meets DOD-A-82720

3M™ Scotch-Weld™ Epoxy Adhesive 2216 is a flexible, two-part epoxy adhesive that cures at room temperature. It provides a high strength bond with both high shear and peel strength while remaining highly flexible, making it ideal for applications where vibration and thermal expansion and contraction are common. It also withstands very cold temperatures without becoming brittle.

When using a Duo-Pak (DP) size adhesive, rely on 3M dispensing equipment (PDF, 1.9 Mb) for convenient and accurate metering, mixing and dispensing.

Maintains a Strong Bond Under Expansion, Contraction, and Limited Movement
Our 3M™ Scotch-Weld™ Epoxy Adhesive 2216 is designed for applications where high performance and flexible bonds are required. Its flexibility makes it ideal for applications involving dissimilar surfaces and where differing coefficients of thermal expansion are a consideration. Once fully cured the epoxy maintains an extremely strong bond under expansion, contraction and limited movement while also maintaining a good retention of strength over time and after environmental aging. With a 2:3 mix ratio it is a low viscosity epoxy. It flows smoothly for accurate dispensing. Both the base and accelerator are coded in contrasting colors to ensure you know which half of the product you are using.

Recommended Applications

- Cryogenic bonding applications where bonded agents might experience temperature extremes
- Potting where expansion and thermal changes may occur, such as solar panels and appliance or construction applications
- Military bonding applications, for example bonding parts on movable transports
- General aerospace and transportation bonding where vibrations and movement are common
- Bonding ceramic, most plastics and glass to metal
- Attaching various substrates to masonry and stone

Available in a variety of sizes to meet your project needs

Excellent for Cryogenic Bonding Applications
We've designed the 3M™ Scotch-Weld™ Epoxy Adhesive 2216 to perform under extremely frigid temperatures. Because it can withstand temperatures up to -423°F (-252°C), it is ideal for cryogenic bonding applications. At room temperature it offers a 90 minute work life to allow for repositioning and adjustments. It will slowly cure over 7 days, but can be heat cured to reduce this to as little as 30 minutes (at 200°F/93°C.) It has a bonded shear strength that can withstand up to 3,200 psi at 72°F (24°C).

Understanding Epoxy Adhesives
Epoxy adhesives, including 5 minute epoxy, are part of the class of adhesives called "structural adhesives," which include polyurethane, acrylic, cyanoacrylate and others. Epoxies are formulated as liquid reactive polymers that undergo a chemical reaction when mixed and then cure to form a solid plastic material. Once the two parts are mixed in their specified ratio, they begin the curing process and offer a limited working time where the adhesive can be applied and the two surfaces positioned as needed. This work life lasts anywhere from a few minutes to several hours. These structural adhesives provide high shear and peel strengths, depending on the formula, and better heat and chemical resistance than other common adhesives. In general, epoxy adhesives have the highest overall strength and offer the best performance and most resistance to high temperatures, solvents and outdoor weathering.

Epoxy adhesive (often referred to as epoxy glue) is widely used in building and home construction; aircraft and automobile manufacturing; bicycle, boat, golf clubs, ski and snowboard assembly as well as a host of home use and other applications. It is used virtually anywhere high-strength bonds are needed along with resistance to environmental conditions. These adhesives are popular for their ease of use, mechanical strength and chemical resistance. Formulations can be created to make epoxy for plastic flexible or epoxy for metal rigid, epoxy resin transparent or opaque, quick setting or slow setting. The versatility with which these adhesives can be formulated helps meet almost any requirement for bonding wood, metal, glass, stone and various plastics.

The 3M™ Scotch-Weld Epoxy Adhesive 2216 B/A product family is intended for industrial applications. If you are looking for an adhesive specified for aerospace applications requiring conformance to AS9100 quality management standard, please see the 3M™ Scotch-Weld EC-2216 B/A product family.

Click here for more information on 3M Structural Adhesives (PDF, 16 Mb).

Resources

3M™ Scotch-Weld™ Epoxy Adhesive 2216 Gray

Safety Data Sheets
(PDF , 0B)

3M EPX Applicators and Nozzles

3M™ EPX Applicators and Nozzles Technical Bulletin

Bulletins
(PDF , 169KB)

3M™ Industrial Adhesives and Tapes

Brochures
(PDF , 12MB)

3M Scotch-Weld
Product Selection Guide

3M™ Scotch-Weld™ Structural Adhesives

Sales Guides
(PDF , 7MB)

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Overall Rating

4.3 ★★★★☆
3 Reviews

Review this Product

☆ ☆ ☆ ☆ ☆

Adding a review will require a valid email for verification

Average Customer Ratings

Quality of Product	Value of Product
4.3	4.3

Filter Reviews

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1 – 3 of 3 Reviews

Sort by Most Recent

★★★★★

Works every time!

Qmac

4 months ago

We have been utilizing this material for years and it has never let us down.

✓ Yes I recommend this product.

Originally posted on 3M™ Scotch-Weld™ Epoxy Adhesive 2216, Translucent, Part B/A, 2 fl oz Tube Kit, 6/Case

Helpful? (0) (0) Report

Quality of Product	5.0
Value of Product	5.0

★★★☆☆

Enjoy the project very much!

smoores

EMPLOYEE REVIEW

5 years ago

I've been loving the se of this product. Been using it for years now.

☒ No I do not recommend this product.

Originally posted on 3M™ Scotch-Weld™ Epoxy Adhesive 2216, Gray

Helpful? (3) (26) Report

Quality of Product	3.0
Value of Product	3.0

★★★★★

Great Results

Solartronik

7 years ago

our solar application, no problems. After trying so many products we are ok.

✓ Yes I recommend this product.

Originally posted on 3M™ Scotch-Weld™ Epoxy Adhesive 2216, Gray

Helpful? (10) (1) Report

Quality of Product	5.0
Value of Product	5.0

Large Volume Order

If you are considering a purchase of this or other 3M Industrial Adhesives and Tape products, our team is ready to help by providing additional information and options. Our technical expertise, customer support, and global capabilities put us in a unique position to address your biggest challenges, and we'll do our best to prove that we should be your supplier of choice.

All fields are required unless indicated optional

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