3M™ Pronto™ Instant Adhesive CA-8, 1 oz, 12 per case

One-Part, High-Strength, Rapid-Setting Cyanoacrylate Adhesive Cures at Room Temperature. Adheres to Many Metals, Plastics, and Rubber.

Bar Code : 0 00 21200 21066 2
3M Order Code : 62-3815-0330-9

Additional Information

It is economical to use because only drops of adhesive are needed. It has excellent adhesion to many metals, plastics and rubber, and produces bonds with more shock resistance than many typical cyanoacrylate adhesives, Meets MIL-A-46050C, Type II, Class

Characteristics

Chemical Base	Ethyl
Color	Clear
Product Form	Bottle
Time to Handling Strength	5 to 40 Second
Trademark Name 1	3M
Trademark Name 2	Scotch-Weld

3M™ Pronto™ Instant Adhesive CA-8, 1 oz, 12 per case

Packaging

3M Order Code: 62-3815-0330-9

Minimum Order Quantity: 12.0 BTLS

Case Quantity: 12.0 BTLS

	English	Metric
Length	3.9 INCH	0.099 MTR
Width	6.0 INCH	0.152 MTR
Height	5.4 INCH	0.137 MTR
Gross Weight	1.1650 LBS	0.5284 KG

Scotch-Weld™
Instant Adhesives

Technical Data

Product Description

3M™ Scotch-Weld™ Instant Adhesives are single component, high strength cyanoacrylate adhesives.

Features

- One component, high strength adhesives that cure at room temperature.
- Products provide varying cure times, bond strengths, and viscosities.
- Can be used to bond a variety of substrates including many rubbers, plastics, and metals.
- Economical to use as it requires only drops of adhesive to provide strong bonds to many metals, plastics, and rubbers.

Description

3M™ Scotch-Weld™ Instant Adhesive CA4 is a high-strength, very fast setting, multi-purpose cyanoacrylate adhesive that cures at room temperature with very low bonding pressures. It has particularly good adhesion to most cured rubbers.

3M™ Scotch-Weld™ Instant Adhesive CA5 is a high-strength, slow setting cyanoacrylate adhesive that cures at room temperature. Its relatively high viscosity is especially useful where some gap filling is desired for bonding rough or uneven surfaces. The longer set rate allows more time for proper alignment of parts to be bonded. Meets CID A-A-3097, Type II, Class 3.

3M™ Scotch-Weld™ Instant Adhesive CA7 is a high-strength, extremely fast setting cyanoacrylate adhesive that cures quickly at room temperature. It has excellent adhesion to many metals, plastics and rubbers, and produces bonds with more shock and impact resistance than many typical cyanoacrylate adhesives.

3M™ Scotch-Weld™ Instant Adhesive CA8 is a high-strength, rapid-setting cyanoacrylate adhesive that cures at room temperature. It has excellent adhesion to many metals, plastics and rubbers, and produces bonds with more shock resistance than many typical cyanoacrylate adhesives. Meets CID A-A-3097, Type II, Class 2.

Description *(continued)*

3M™ Scotch-Weld™ Instant Adhesive CA9 is a high-strength cyanoacrylate adhesive that cures slower than many cyanoacrylates at room temperature. The longer set rate allows more time for proper alignment of parts before bonding takes place. It has excellent adhesion to many metals, plastics and rubbers, and produces bonds with more shock and impact resistance than many typical cyanoacrylate adhesives. Meets CID A-A-3097, Type II, Class 3.

3M™ Scotch-Weld™ Instant Adhesive CA40 is a high-strength, very fast-setting cyanoacrylate adhesive that cures at room temperature with very low bonding pressures. It has particularly good adhesion to many difficult to bond substrates such as EPDM rubber, aluminum and flexible vinyl.

3M™ Scotch-Weld™ Instant Adhesive CA40H is a high-strength cyanoacrylate adhesive. It is a higher viscosity, slightly slower setting version of Scotch-Weld CA40. It has particularly good adhesion to many difficult to bond substrates, such as aluminum, EPDM rubber, and flexible vinyl. Scotch-Weld CA40H exhibits good resistance to soap solutions and isopropyl alcohol. Its high viscosity helps prevent run off during application, and its slower set time allows additional time for proper alignment of parts.

3M™ Scotch-Weld™ Instant Adhesive Gel CA50 is a high-strength, surface insensitive, gel cyanoacrylate adhesive. Its gel consistency allows it to be used in many non-sag vertical applications, and to fill gaps up to .020 inches. The very slow cure rate allows plenty of time to reposition parts.

3M™ Scotch-Weld™ Instant Adhesive CA100 is a high-strength cyanoacrylate adhesive. Its relatively high viscosity (approximately 3000 cps) allows gap-filling capability up to .020 inches. It has high T-Peel strength, thermal shock resistance, impact resistance, and excellent metal bonding capabilities.

Scotch-Weld™
Instant Adhesives

Typical Physical Properties (uncured)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

	3M™ Scotch-Weld™ Instant Adhesive								
Product	**CA4**	**CA5**	**CA7**	**CA8**	**CA9**	**CA40**	**CA40H**	**Gel CA50**	**CA100**
Color	Clear	Clear	Clear	Clear	Clear	Yellow	Clear	Clear	Clear
Base	Ethyl	Ethyl	Methyl	Ethyl	Ethyl	Ethyl	Ethyl	Ethyl	Ethyl
Viscosity (cps)	150	2000	15-40	70-130	1000-1700	20	400-600	45,000-85,000	2500-4500
Specific Gravity	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.07	1.05
Net Weight (lbs/gal)	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.9	8.7

Typical Physical Properties (cured)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

	Scotch-Weld								
Product	**CA4**	**CA5**	**CA7**	**CA8**	**CA9**	**CA40**	**CA40H**	**Gel CA50**	**CA100**
Time to Handling Strength (seconds)	5-40	12-60	1-30	5-40	20-70	3-20	5-40	60-120	20-70

Overlap Shear Strength Tested at 75°F [23°C] (psi)

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

	Scotch-Weld								
Product	**CA4**	**CA5**	**CA7**	**CA8**	**CA9**	**CA40**	**CA40H**	**Gel CA50**	**CA100**
Steel	2300	2500	2500	2000	2000	1700	1500	2000	2000
Aluminum - etched	2800	600	2400	2100	2400	2600	1500	900	2900
ABS	800*	800*	900*	900*	900*	800*	900*	800*	600*
PVC	800*	800*	1000*	1000*	1000*	800*	1000*	600*	700*

Overlap Shear Metal to Metal Bond Strength tested @ 75°F (23°C) (psi)

Tensile Shear Strength (as defined in ASTM-D-1002) - cured 48 hours at 68°F (20°C) - 60% Relative Humidity - abraded and acetone wiped - test specimen is 1/2 sq. in. bond tested @ .1 in./minute loading rate.

*Substrate Failure

Storage

Store in original containers at or below 80°F (27°C).

Shelf Life

These products can be expected to have at least nine months shelf life. At lower temperature, the shelf life will be longer. Lower temperatures cause increased viscosity of a temporary nature and also will cause water to condense on the container. Therefore, containers stored at low temperatures should be allowed to return to room temperature before opening so that water does not come in contact with the adhesive and cause adhesive gelation.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

Product Use

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

Warranty and Limited Remedy

Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.

Limitation of Liability

Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

3M

Industrial Business
Industrial Adhesives and Tapes Division

Material Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM)Scotch-Weld(TM) Instant Adhesive CA-8
MANUFACTURER: 3M
DIVISION: Industrial Adhesives and Tapes

Document Group: 10-2987-5

Product Use:
Intended Use: Structural Strength Instant Adhesive
Specific Use: Cyanoacrylate Adhesive

Fomerly known as 3M(TM) Pronto(TM) Instant Adhesive CA-8

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
ETHYL CYANOACRYLATE	7085-85-0	97 - 99
POLY(METHYL METHACRYLATE)	9011-14-7	< 3
HYDROQUINONE	123-31-9	< 0.5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Thin Liquid
Odor, Color, Grade: Clear, colorless, sharp irritating odor
General Physical Form: Liquid
Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Combustible liquid and vapor. Hazardous polymerization may occur. May cause severe eye irritation. May cause allergic skin reaction. May bond tissue rapidly.

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	*No Data Available*
Flash Point	Approximately 174 ºF [*Test Method:* Tagliabue Closed Cup]
Flammable Limits - LEL	*No Data Available*
Flammable Limits - UEL	*No Data Available*

5.2 EXTINGUISHING MEDIA
Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide). DO NOT USE WATER

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

Unusual Fire and Explosion Hazards: Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Combustible liquid and vapor.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Place in a closed container approved for transportation by appropriate authorities. DO NOT wipe spill or residue with cleanup materials containing cotton.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING
Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid contact with oxidizing agents. Keep out of the reach of children. Avoid eye contact with vapors, mists, or spray. Avoid breathing of vapors, mists or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid contact with water to prevent potentially violent reaction or fire. Contents may be under pressure, open carefully.

7.2 STORAGE
Store away from acids. Store away from heat. Store out of direct sunlight. Store away from oxidizing agents. Keep container in well-ventilated area. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment. Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Safety Glasses with side shields, Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.
Gloves made from the following material(s) are recommended: Butyl Rubber, Polyvinyl Alcohol (PVA), Polyethylene/Ethylene Vinyl Alcohol. The following protective clothing material(s) are recommended: Apron - Polyethylene ethylene vinyl alcohol, Coveralls - Polyester, Fire retardant. DO NOT wear cotton gloves.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.
Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece air-purifying respirator with organic vapor cartridges and N95 particulate prefilters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
ETHYL CYANOACRYLATE	ACGIH	TWA	0.2 ppm	
HYDROQUINONE	ACGIH	TWA	2 mg/m3	Table A3
HYDROQUINONE	CMRG	STEL	4 mg/m3	
HYDROQUINONE	OSHA	TWA	2 mg/m3	Table Z-1

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Thin Liquid
Odor, Color, Grade:	Clear, colorless, sharp irritating odor
General Physical Form:	Liquid
Autoignition temperature	*No Data Available*
Flash Point	Approximately 174 ºF [*Test Method:* Tagliabue Closed Cup]
Flammable Limits - LEL	*No Data Available*

Flammable Limits - UEL	*No Data Available*
Boiling point	131.00 ºF [*Details:* CONDITIONS: @ 2mm Hg]
Density	1.05 g/ml
Vapor Density	4.5 [*Ref Std:* AIR=1]
Vapor Pressure	<=27 psia [@ 131 ºF] [*Details:* MITS data]
Specific Gravity	1.050 [*Ref Std:* WATER=1]
Melting point	*Not Applicable*
Solubility in Water	Nil
Evaporation rate	Negligible
Kow - Oct/Water partition coef	*No Data Available*
Percent volatile	0.00 % weight
VOC Less H2O & Exempt Solvents	*No Data Available*
Viscosity	70.0 - 130 centipoise [*Test Method:* Brookfield]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong bases; Amines

Hazardous Polymerization: Hazardous polymerization may occur. Additional Information: May occur in large quantities only.

Hazardous Decomposition or By-Products

Substance	Condition
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.