WELD-ON®

TECHNICAL DATA SHEET

Weld-On 16 DCM TCE FREE

Acrylic Plastic Cement

FOR INDUSTRIAL AND PROFESSIONAL USE ONLY. NOT FOR CONSUMER USE.

SUBSTRATE RECOMMENDATIONS

Weld-On® 16 DCM TCE FREE is a methylene chloride and trichloroethylene free solvent cement, especially formulated to bond acrylic (polymethyl methacrylate) plastic. It can also be used for bonding butyrate, ABS and polycarbonate, as well as other plastics and porous surfaces.

BONDING RECOMMENDATIONS

Weld-On 16 DCM TCE FREE is recommended as an excellent general purpose, high strength acrylic cement. It is especially useful where fast cure and high strength are desired for applications such as large housings, signs, plastic letters, industrial fabrications, display items, lenses and models.

GENERAL DESCRIPTION

Weld-On 16 DCM TCE FREE is a very high strength, clear, medium bodied, fast curing, solvent-type acrylic cement. Applied to cast, molded or extruded acrylics, it will affect initial bonds very quickly so some parts may be handled within a few minutes. Bond strength continues to develop very rapidly reaching a substantial level and forming strong joints within hours. This product may be thinned with Weld-On 3 DCM TCE FREE by approximately 10%. Initial bond forms very quickly so some parts may be handled within a few minutes of application. Joints are water and weather resistant and will generally have similar physical and chemical properties to acrylic plastic.

TYPICAL BOND STRENGTH†

Substrate Material	Aged Bond Strength, lbs/in² (kg/cm²)		
	2 Hours	24 Hours	1 Week
Acrylic	761 (53.5)	2,626 (184.6)	3,091 (217.3)

†Substrate thickness: 0.25 inch (0.64 cm). Bond area: 1.0² in (6.45²cm)

ADHESIVE PROPERTIES AND CHARACTERISTICS @ 73°F (23°C)

Color:	Clear	Fixture Time (Time to reach 80% of ultimate strength):	10 Minutes
Viscosity:	800 ± 100 cps	Time to Reach 80% of Ultimate Bond Strength:	24 Hours
Working Time:	5 Minutes	Specific Gravity:	1.202 ± 0.01

DIRECTIONS FOR USE

- Parts to be joined should be clean and fit without forcing.
- Apply Weld-On 16 DCM TCE FREE to one or both surfaces with brush, polyethylene squeeze bottle or gun.
- If cement is applied to one surface, bring the two surfaces in gentle contact for several seconds to allow the dry surfaces to be softened.
- Assemble with firm pressure while parts are still wet.
- Hold or clamp assembled parts firmly until initial set. Joint strength will increase greatly in 24 hours. Thereafter, strength will continue to increase gradually for some weeks.

AVAILABILITY

This product is available in gallon (3.785 liters) and pint (473 ml) metal cans. Also available in 5 oz. (148 ml) and 1.5 oz. (44 ml) metal tubes. For detailed information on containers and applicators, refer to the current Sign and Display Assembly Selection Guide and Price List.

SHELF LIFE

Two years in tightly sealed containers. The date code of manufacture is stamped on the bottom of the container. Stability of the product is limited by the evaporation of the solvent when the container is opened. Evaporation of solvent will cause the cement to thicken and reduce its effectiveness. Adding of thinners to change viscosity is not recommended and may significantly change the properties of the cement.

QUALITY ASSURANCE

Weld-On Weld-On 16 DCM TCE FREE is carefully evaluated to assure that consistent high quality is maintained. Fourier transform infrared spectroscopy, gas chromatography, and additional in depth testing ensures each batch is manufactured to exacting standards. A batch identification code is stamped on each can and assures traceability of all materials and processes encountered in manufacturing this plastic cement for its intended specific application.

IPS Adhesives, 600 Ellis Road, Durham, NC 27703 • Toll Free: 1-800-888-8312 • Fax: 901-853-5008 **ipsadhesives.com**

©2025 IPS, Weld-On 16 DCM TCE Free TDS

SHIPPING

Shipping Information for all sizes: iProper Shipping Name: Adhesives. Hazard Class: 3. Identification Number: UN 1133. Packing Group: II. Label Required: Flammable Liquid.

SAFETY AND ENVIRONMENTAL PRECAUTIONS

This product is a flammable, fast evaporating solvent cement. It is considered a hazardous material. In conformance with the Federal Hazardous Substance Labeling Act, the following hazards and precautions are given. Purchasers who may re-package this product must also conform to all local, state, and federal labeling, safety and other regulations.

DANGER: HIGHLY FLAMMABLE LIQUID AND VAPOR. MAY CAUSE AN ALLERGIC SKIN REACTION. SUSPECTED OF CAUSING CANCER.

Keep out of the reach of children. Do not take internally. Keep away from heat, spark, open flame and other sources of ignition. Contact with hot surfaces may produce toxic effects. Keep container closed when not in use. Store away from direct sunlight below 80º F (27º C). Use only in adequate ventilation. Avoid breathing of vapors. Atmospheric levels should be maintained below established exposure limit values. See Sections II and VIII of Safety Data Sheet. If airborne concentrations exceed these limits, use a supplied air respirator. Do not use a chemical cartridge respirator. For emergencies and other conditions where short-term exposure may be exceeded, use an approved positive pressure self-contained breathing apparatus. In confined areas, use a positive pressure self-contained breathing apparatus (SCBA). Do not smoke, eat or drink while working with this product. Avoid contact with skin, eyes, and clothing. May cause eye injury. Protective equipment such as gloves, safety goggles, and impervious apron should be used. Carefully read Safety Data Sheet and follow all precautions.

Contains trans-dichloroethylene (156-60-5), methyl methacrylate (80-62-6), and nitromethane (75-52-5).

“Title III Section 313 Supplier Notification:” This product contains toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40CFR372. This information must be included in all I Safety Data Sheets that are copied and distributed for this material.

FIRST AID

Inhalation: If overcome with vapors, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician.
Eye Contact: Flush with plenty of water for 15 minutes and call a physician.
Skin Contact: Wash skin with plenty of soap and water for at least 15 minutes. If irritation develops, get medical attention.
Ingestion: If swallowed, give 1 or 2 glasses of water or milk. Do not induce vomiting. Contact physician or poison control center immediately.

IMPORTANT NOTE

THIS PRODUCT IS INTENDED FOR INDUSTRIAL AND PROFESSIONAL USE ONLY. NOT FOR CONSUMER USE. These suggestions and data are based on information we believe to be reliable. Users should verify by test that this product, as well as these methods, is suited to their application.

WARRANTY

IPS Corporation (IPS Corp.) warrants that all new IPS Corp. products shall be of good quality and free from defects in material and workmanship for the shelf life as indicated on the product. If any IPS Corp. product becomes defective, or fails to conform to our written limited warranty under normal use and storage conditions, then IPS Corp. will, without charge, replace the nonconforming product. However, this limited warranty shall not extend to, nor shall IPS Corp. be responsible for, damages or loss resulting from accident, misuse, negligent use, improper application, or incorporation of IPS Corp. products into other products. In addition, any repackaging of IPS Corp. products also shall void the limited warranty. IPS Corp. shall not be responsible for, nor does this limited warranty extend to, consequential damage, or incidental damage or expense, including without limitation, injury to persons or property or loss of use. Please refer to our standard IPS Corp. Limited Warranty for additional provisions.

IPS Adhesives, 600 Ellis Road, Durham, NC 27703 • Toll Free: 1-800-888-8312 • Fax: 901-853-5008 **ipsadhesives.com**

©2025 IPS, Weld-On 16 DCM TCE Free TDS