



# WELD-ON

# WELD-ON 16

## ACRYLIC PLASTIC CEMENT

### SUBSTRATE RECOMMENDATIONS

WELD-ON 16 is especially formulated to bond acrylic plastic. It can also be used for bonding styrene, butyrate, PVC and polycarbonate, as well as other plastics and porous surfaces.

### BONDING RECOMMENDATIONS

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

### BOND STRENGTH DATA

The following strength data was obtained with compressive shear loading at 0.05"/min. The materials tested were 1/4" acrylic lap joints of 1 sq. in. bonding area.

SUBSTRATE MATERIAL	24 HOURS	1 WEEK
Acrylic	1700 PSI	2200 PSI
Polycarbonate	1000	1700
Styrene	900	1700

### ADHESIVE PROPERTIES AND CHARACTERISTICS

COLOR:	Clear	
VISCOSITY:	800 cps	
WORKING TIME:	2 – 3 minutes	
FIXTURE TIME:	5 – 6 minutes	
80% STRENGTH:	16 hours	
SPECIFIC GRAVITY:	1.02 ± .040	
COVERAGE:	10mil:	28sq. ft./Pint
	20mil:	14sq. ft./Pint
		224 sq. ft./Gallon
		112 sq. ft./Gallon

### DIRECTIONS FOR USE

- Parts to be joined should be clean and fit without forcing.
- Apply WELD-ON 16 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.

### SHELF LIFE

Two years expectancy in tightly sealed containers. Stability of the product is limited by the permanence of the container and the evaporation of the solvent when container is open. Evaporation of solvent will cause the cement to thicken and reduce the effectiveness of the cement.

## SHIPPING

**Shipping Information for Individual Containers Larger than One Liter:** DOT Shipping Name: Flammable liquid, toxic, n.o.s. (Methyl Ethyl Ketone, Dichloromethane). DOT Hazard Class: 3 with subsidiary risk Hazard Class of 6.1. ID #: UN1992. Packaging Group: II. Label: Flammable Liquid & Toxic.

**Shipping Information for Less than One Liter:** No packaging or shipping exceptions available. May not be shipped as Consumer Commodity/ Limited Quantity/ ORM-D

## SAFETY AND ENVIRONMENTAL PRECAUTIONS

WELD-ON 16 is a flammable, fast evaporating solvent cement and is considered a hazardous material. In conformance with the Federal Hazardous Substances Labeling Act, the following hazards and precautions are given. Purchasers who may repackage this product must also conform to all local, state and federal labeling, safety and other regulations.

### **DANGER - EXTREMELY FLAMMABLE - VAPOR HARMFUL - MAY BE HARMFUL IF SWALLOWED - MAY IRRITATE SKIN OR EYES**

Keep out of 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 in the shade below 80°F. Use only in well ventilated area. Avoid breathing of vapors. Atmospheric levels should be maintained below established exposure limits. See Section II and VIII of the Material Safety Data Sheet. If airborne concentrations exceed those limits, use a supplied air respirator. Do not use a chemical cartridge respirator. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus (SCBA). Do not smoke, eat or drink while working with product. Avoid contact with skin, eyes and clothing. May cause eye injury. Protective equipment such as gloves, goggles and impervious apron should be used. Carefully read Material Safety Data Sheet and follow all precautions. Contains Methyl Ethyl Ketone (78-93-3), Methylene Chloride (75-09-2) and Methyl Methacrylate Monomer (80-62-6). Methylene Chloride is a possible human cancer hazard based on test results with laboratory animals. Risk to your health depends on level and duration of exposure, as well as individual sensitivity. Do not use this product for other than intended use.

"Proposition 65 Warning": This product contains chemicals known to the State of California to cause cancer.

"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 MSDS's that are copied and distributed for this material.

## FIRST AID

**Inhalation:** If ill effects from inhalation, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call physician.

**Eye or Skin Contact:** Flush with plenty of water for 15 minutes. If irritation persists, get medical attention.

**Ingestion:** If swallowed, do not induce vomiting. Contact physician immediately.

## QUALITY ASSURANCE:

Every batch of this cement is checked to assure that consistent quality is maintained. An infrared absorption curve is recorded for each batch to ensure that this cement is properly formulated. Samples are taken from all batches and kept for a period of at least one year. A batch identification code is stamped on each can.

## IMPORTANT NOTE:

This product is intended for use by skilled individuals at their own risk. 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, are suited to their application. Since specific use, materials and handling are not controlled by IPS, our warranty is limited to the replacement of defective IPS products.

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