



#### New Weld-On®

# Methylene Chloride-FREE and Trichloroethylene-FREE Solvent Cements for Acrylics

## Introducing the NEW Weld-On® 3, Weld-On® 4 and Weld-On® 16



Weld-On® 3 is a water-thin, non-flammable cement formulated for clear bond to many thermoplastic substrates, particularly acrylic. The initial bond forms within a few minutes and quickly increases in strength to a high level within only a few hours.

#### **SUBSTRATE RECOMMENDATIONS**

Bonds acrylic (PMMA) to itself.



Weld-On® 4 is a water-thin cement formulated to develop clear bond within minutes with a longer time full bond strength than Weld-On 3. It is less likely to leave white marks (commonly called blushing) with significant and increased strength reached over several hours.

#### SUBSTRATE RECOMMENDATIONS

Blush-resistant cement for bonding acrylic (PMMA) to itself.



Weld-On® 16 is a medium-bodied, clear solvent-type acrylic cement with very high strength. The fast curing time means some parts may be handled within a few minutes when applied to cast, molded or extruded acrylics. Bond strength continues to develop very rapidly reaching a substantial level and forming strong joints within hours.

#### SUBSTRATE RECOMMENDATIONS

Formulated for acrylic (PMMA); also bonds butyrate, PVC, ABS, polycarbonate, and porous plastics.

WELD-ON® NUMBER	STOCK NUMBER	COLOR	NUMBER OF COMPONENTS	WORKING TIME	FIXTURE TIME	ULTIMATE BOND STRENGTH	MINIMUM EXPECTED SHELF LIFE @73°F (yr)	TYPICAL SPECIFIC GRAVITY (g/cc)	VISCOSITY REFERENCE	SIZES	UNITS/CASE
3	16369 16372 16370 16371	clear clear clear clear	1 1 1	1 min 1 min 1 min 1 min	2 min 2 min 2 min 2 min	2,825 lbs/in 2,825 lbs/in 2,825 lbs/in 2,825 lbs/in	2 years 2 years 2 years 2 years	$1.218 \pm 0.01$ $1.218 \pm 0.01$ $1.218 \pm 0.01$ $1.218 \pm 0.01$	waterthin waterthin waterthin waterthin	GALLON QUART PINT 1/4 PINT	4 4 6 24
4	16374 16377 16375 16376	clear clear clear clear	1 1 1	1-2 min 1-2 min 1-2 min 1-2 min	3 min 3 min 3 min 3 min	2,429 lbs/in 2,429 lbs/in 2,429 lbs/in 2,429 lbs/in	2 years 2 years 2 years 2 years	$1.164 \pm 0.01$ $1.164 \pm 0.01$ $1.164 \pm 0.01$ $1.164 \pm 0.01$	water thin water thin water thin water thin	GALLON QUART PINT 1/4 PINT	4 4 6 24
16	16381 16382 16383 16384	clear clear clear clear	1 1 1	5 min 5 min 5 min 5 min	10 min 10 min 10 min 10 min	2,626 lbs/in 2,626 lbs/in 2,626 lbs/in 2,626 lbs/in	2 years 2 years 2 years 2 years	$1.202 \pm 0.01$ $1.202 \pm 0.01$ $1.202 \pm 0.01$ $1.202 \pm 0.01$	water thin water thin water thin water thin	GALLON PINT 5 oz TUBE 1.5 oz TUBE	





# **Benefits of Solvent Bonding vs Mechanical Fastening**

## **Solvent Bonding**

#### **Advantages**

- ✓ Evenly distributes stress on substrate
- ✓ Joins complex parts
- ✓ Invisible finish on sign substrate's surface
- ✓ Acts as a sealant & prevents corrosion
- ✓ Works well with thin metals
- ✓ Requires little finishing and training
- ✓ Reduce labor time and cost
- ✓ Can be sanded, painted or drilled
- ✓ Bonds dissimilar substrates
- Reduces vibrations

## **Disadvantages**

X Some curing time required

## **Mechanical Fastening**

#### **Advantages**

- Can be easily inspected once installed; may be pulled apart
- ✓ Immediate connection; no curing time

#### **Disadvantages**

- ✗ Stress only at the connection point; not consistently spread across substrate
- ✗ Visible on signage
- X Difficult to paint or hide
- ✗ Higher probability of leakage/ corrosion at joints