

# TECHNICAL DATA SHEET

4007

Low VOC High-Strength Cement for Rigid & Foamed PVC

# SUBSTRATE RECOMMENDATIONS

Weld-On® 4007 is specifically formulated for solvent cementing rigid Polyvinyl Chloride (PVC) and foamed PVC to themselves and each other.

#### **BONDING RECOMMENDATIONS**

Weld-On 4007 is recommended for vinyl where a medium bodied cement is desired. It is suitable for a wide variety of applications. It may be used on both large and small assemblies, large displays, signs, lighting fixtures, housewares, large and small containers, toys, electrical or electronic assemblies, decorator items, etc.

#### **GENERAL DESCRIPTION**

Weld-On 4007 is a clear, medium bodied, syrupy, free flowing, very fast curing, high strength, solvent cement. Initial bond forms very quickly so that 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 weather resistant and will generally have physical and chemical properties similar to those of rigid vinyl.

#### TYPICAL BOND STRENGTH<sup>†</sup>

Substrate Material	Aged Bond Strength, Ibs/in² (kg/cm²)				
	2 Hours	24 Hours	1 Week		
PVC	260	500	900		
ABS	200	650	1,050		

<sup>1</sup>Substrate thickness: 0.25 inch (0.64 cm). Bond area: 1.0 in<sup>2</sup> (6.45 cm<sup>2</sup>). Ultimate Bond Strength is defined as strength achieved after 24-hour room temperature cure.

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

Color: Clear Tim		Time to reach ultimate bond strength:		72 Hours	
Viscosity:	$800 \pm 200 \text{ cps}$	Specific Gravity	<b>/</b> :		$0.934 \pm 0.01$
Working Time:	20 Minutes	Coverage:	10 mil:	35 sq ft/pint	280 sq ft/gallon
FIXTURE TIME (Time to reach 80% of ultimate st	trength): 25 Minutes		20 mil:	17 sq ft/pint	140 sq ft/gallon

# **DIRECTIONS FOR USE**

JOINT PREPARATION: Parts to be joined should fit without forcing. Surfaces should be clean and smooth. A good machine finish or sanding with 200-400 grit sandpaper should be satisfactory. Some molded and extruded parts may have a very hard and glossy surface which may require special priming to prepare the surface prior to cementing. In these cases, contact us for further information.

APPLICATION OF CEMENT: Weld-On 4007 can be applied by brush, spray, roller coating, pump-type oil cans, polyethylene squeeze bottles and other devices. Cement may be applied to one or both surfaces.

ASSEMBLY OF PARTS: Assemble while parts are still wet. If cement is applied to one surface, let the two surfaces be in gentle contact for a few seconds to allow the cement to soften the dry surface. Then press parts together in firm contact. If both of the parts have been coated, they may be brought firmly together immediately. The application of pressure of 2 to 10 lbs per square inch should materially increase bond strength. Spring-loaded clothespins may be very suitable as clamps. The length of time required for clamp or jig pressure will vary. A few hours or more may be needed for difficult joints, but only a few minutes for parts that fit well, and have modest load requirements.

#### **AVAILABILITY**

This product is available in gallon (3.785 liters) metal cans. For detailed information on containers and applicators, refer to the current Sign and Display Assembly Selection Guide and Price List.

# SHELF LIFE

Three 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 its effectiveness.

# **QUALITY ASSURANCE**

Weld-On 4007 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.



#### **SHIPPING**

**Shipping Information for Gallon and Above:** DOT Shipping Name: Adhesive. ID #: UN1133. Packaging Group: II. Label: Flammable Liquid DOT Hazard Class: Flammable Liquid. **For Less than One Gallon:** DOT Shipping Name: Consumer Commodity. DOT Hazard Class: ORM-D.

# **SAFETY AND ENVIRONMENTAL PRECAUTIONS**

This product is a flammable solvent cement. It is considered a hazardous material. In conformance with the Federal Hazardous Substances 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: 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. Keep container closed when not in use. Store away from direct sunlight between  $40^{\circ} \, \text{F} - 110^{\circ} \, \text{F}$  ( $5^{\circ} \, \text{C} - 43^{\circ} \, \text{C}$ ). Use only with adequate ventilation. Avoid breathing of vapors. Atmospheric levels should be maintained below established exposure limit values contained in Section II and VIII of the Material Safety Data Sheet. If airborne concentrations exceed those limits, use of a NIOSH-approved organic vapor cartridge respirator with full face-piece is recommended. The effectiveness of an air-purifying respirator is limited. Use it only for a single short-term exposure. For emergency and other conditions where short-term exposure guidelines may be exceeded, use an approved positive pressure self-contained breathing apparatus. 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 Material Safety Data Sheet and follow all precautions.

Contains Tetrahydrofuran (109-99-9), Methyl Ethyl Ketone (78-93-3) and Cyclohexanone (108-94-1). Do not use this product for other than intended use.

"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 Material 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 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, 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.