8848 Hacks Cross Rd Olive Branch, MS 38654 Fax (662) 895-4439 <u>www.accrabond.com</u> Phone (662) 895-4480

## **TECHNICAL DATA BULLETIN**

# INSTAbond<sup>®</sup> S-500

Cyanoacrylate Adhesive

**PRODUCT DESCRIPTION:** 

INSTAbond<sup>®</sup> S-500 is a single component cyanoacrylate. This technology bonds most closefitting smooth surfaces in seconds. INSTAbond<sup>®</sup> S-500 contains no solvent and has low toxicity, which makes it very popular and easy to use. Additionally, this material requires no mixing or heating and can be used on a wide variety of substrates.

INSTAbond<sup>®</sup> S-500 meets Mil-S-46050C Type 2, Class 3, superceded by A-A-3097, Type 2, Class 3.

## **INSTRUCTIONS FOR USE:**

To maximize performance of INSTAbond<sup>®</sup> S-500 cyanoacrylate, clean and degrease all substrates before applying adhesive. Make sure substrates are dry before applying adhesive. Apply a thin bond line for best results. Difficult to bond plastics like polyethylene, polypropylene, ABS, EPDM and silicone rubber will require INSTAbond<sup>®</sup> PDQ Primer for best results. If setting time is longer than desired (caused by low humidity or large gap fill), use INSTAbond<sup>®</sup> PDQ Accelerator.

## PROPERTIES OF MATERIALS AS SUPPLIED

| Property             | Test Method | Unit          | Value                     |
|----------------------|-------------|---------------|---------------------------|
| Chemical Type        |             |               | Ethyl Cyanoacrylate       |
| Appearance           | Visual      |               | Transparent, clear liquid |
| Density              | ASTM D792   | g/cc (lb/gal) | 1.05                      |
| Brookfield Viscosity | ASTM D2393  | сР            | 450-550                   |

## **CURED PROPERTIES**

| Property                          | Test Method | Unit  | Value   |
|-----------------------------------|-------------|-------|---------|
| Gap Filling                       |             |       | 0.20 mm |
| Tensile Strength (steel to steel) | ASTM D-2095 | N/mm2 | 25-30   |
| Tensile LapShear (steel to steel) | ASTM D-1002 | N/mm2 | 15-26   |

## CURE SPEED – based on 50% RH at 22°C (72°F)

| Substrate | Unit                |  |
|-----------|---------------------|--|
| Plastic   | 30 Seconds          |  |
| Rubber    | 25-45 Seconds       |  |
| Metal     | Metal 25-45 Seconds |  |
| Wood      | 25-45 Seconds       |  |

## STORAGE

This product should be stored at 25°C (77°F) and out of direct sunlight. Product should be stored in the original, closed container. Shelf life is 12 months when stored in accordance with manufacturer's recommendations.

Refer to the INSTAbond<sup>®</sup> S-500 Material Safety Data Sheet for instructions on safe handling of this material.

## PACKAGING:

INSTAbond<sup>®</sup> S-500 is available in 1-oz, 2-oz, 4-oz, 500 gram (1.1 lb.) bottles. Other package sizes and options are available upon request.

## NOTE

The information contained in this document is furnished for information only and it's believed to be reliable based on previous evaluations. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for user's application based on user's production methods. This data should only be used as a guide for determining feasibility for a particular application.

## **Conversion Information:**

(°C x 1.8) + 32 = °F N x 0.225 = lbs N/mm x 5.71 = psi N/mm<sup>2</sup> x 145 = psi N·m x8.851 = lb. in mP·s = cP

PRODUCT INFORMATION CONTAINED HEREIN IS INTENDED FOR REFERENCE ONLY. MATERIAL SAFETY DATA INFORMATION AVAILABLE AT (662) 895-4480 OR IN WRITNG TO: ACCRAbond, Inc. 8848 Hacks Cross Road, Olive Branch, MS 38654-1827, <u>www.accrabond.com.</u>