

Unit 3, Shipton Way Express Business Park Northampton Road Rushden, Northants, NN10 6GL Tel: +44 (0) 870 458 7388 Fax: +44 (0) 870 458 9077 14/03/06

METAL PREP 90

PRODUCT DATA SHEET

Metal Prep 90 is a chemical primer and conditioner that will improve the long-term durability of methacrylate adhesives when used to bond aluminum and stainless steel surfaces. It contains a red dye in an isopropyl alcohol carrier and also acts to clean contaminants on the metal surface when wiped on.

FEATURES

- Improves long term durability of Devweld 530, Devweld 531 and Plastic Welder when used to ٠ bond aluminum and stainless steel
- Can be used within minutes of applying ٠
- Fast drying at ambient temperatures •
- Excellent corrosion resistant bond lines •
- Cleans metal prior to bonding •

RECOMMENDED APPLICATIONS

- Bonding window and door assemblies •
- Adhering aluminum panels. •
- Bonding coated metals for cosmetic jewelry assembly. •
- Signage assembly.
- Bonding ABS to aluminum in fork truck and appliance applications. •

15.17

15

21 17 22.75

19.65

19.66

25

20

Primer/Salt Spray

No Primer/Salt Spray

PRODUCT DATA : Typical Properties

Colour. Transpare % Solids 5 Carrier Solvent Isopropyl Density (grams/cm³). 0.977 Weight/litre 37 Drying time, 24°C 1-3 min. a Flashpoint 13°C Shelf Life 429 cm³ / Coverage 18m²/ 473	Alcohol as wiped onto surface, red residue necessary f kg 6 months @ room temperature (16°C - 32°C)
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60 ga. Stainless Steel 304 Overlap Shear Strength (N/mm²)

0

Primer/No Exp.

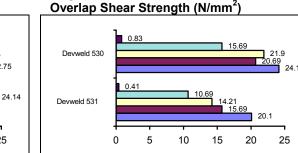
No Primer/No Exp.

Devweld 530

Devweld 531

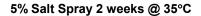
3.89

5



5% Salt Spray 2 weeks @ 35°C

10



Primer/No Exp.

Primer/Salt Spray

60 ga. 6061-T6 Aluminum

Acid Etch/No Exp.

Acid Etch/Salt Spray

No Primer/Salt Spray



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TEST PROCEDURE

Unprepared metal surfaces is wiped with Metal Prep 90 and allowed to dry 3 minutes before bonding. A bond thickness of 0.03" was used with a 25mm x 25mm over lap per ASTM D 1002 and allowed to cure 24 hours before salt spray exposure. An average of 5 samples were used and all were within one standard deviation.

DIRECTIONS FOR APPLICATION

Metal Prep 90 is an easy to use primer designed for priming aluminum and stainless steel parts prior to bonding with Devweld 530, Devweld 531 and Plastic Welder adhesives. Excess oils or contaminants should be wiped from the metal surface prior with a dry cloth. The primer should be applied in a thin coat. The recommended application technique is to wipe or brush on a thin, red layer and allow to dry. A cloth, sponge, brush, or roller may also be used. When a red tint is seen on the surface, enough primer has been applied. An even amount of primer across the bond area is recommended. The adhesive must be applied and parts assembled between 3 minutes and 7 days after priming; beyond 7 days the parts must be re-primed. Pre-primed metal one week old has shown to maintain 95% of freshly primed metal bond strength after a two week exposure to 5% salt spray @ $35^{\circ}C$.

HANDLING AND SAFETY

Close container after use to prevent alcohol evaporation. Avoid skin and eye contact. Wash it soap and water after skin contact. In case of eye contact, flush with water for 15 minutes and get medical attention. Harmful if swallowed. Keep out of reach of children. Keep away from heat, sparks, and open flames.

STORAGE AND SHELF LIFE

Store in an area above 16°C and not more than 32°C for a shelf life of 6 months as unopened. Opened containers should be re-closed tightly and stored away from sparks, heat, and open flames.

PRECAUTION

For complete safety and handling information, please refer to the appropriate Material Safety Data Sheets prior to using this product.

WARNING: INDUSTRIAL USE ONLY

ORDERING INFORMATION

Stock No	Unit size
19650	473ml

Warranty: Devcon will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.

Disclaimer: All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Devcon makes no representations or warranties of any kind concerning this data.

For technical assistance please call +44 (0) 870 458 7388