

#### DESCRIPTION

PRIMER WS is an isocyanate and solvent-based primer specially developed to improve the adhesion and maximize the bonding of sealants on low surface energy substrates used in the transportation market and more specifically the glass bonding.

This all-in-one primer is also compatible with all EMFI polyurethane and hybrid sealants.

## AREAS OF APPLICATIONS

The surface preparation can be made with the PRIMER WS either alone or in combination with the ACTIVATOR to promote adhesion, improve bond durability and provide optimum protection against UV rays on organic or mineral glass.

PRIMER WS is used on glass and silk-screened ceramic frit glass for the bonding of windshield or glass (on cars, trains, buses, trucks and specialty vehicles) as well as on vehicle body frames. It acts as a corrosion inhibitor on metal and can be applied on pinch-weld scratches and nicks. PRIMER WS is also recommended in the marine industry (for windshield or porthole bonding) to prime acrylic (PMMA) or polycarbonate windows, fiberglass and polyester.

PRIMER WS can also be used as a multipurpose primer on many non-porous substrates used in the transportation market, like aluminium, metals, stainless steel, painted surfaces, ABS, wood and PVC).

For applications other than glass bonding, it is recommended to do preliminary adhesion and compatibility tests - contact our technical service.

## TECHNICAL DATA

Color	Black
Viscosity (DIN cup Ø4 mm, 100 ml) at 20°C	11 to 14 s
Density at 20°C	0.935 ± 0.025
Application temperature	5 to 35°C
Drying time	15 min *

\* if the temperature is below 20°C, a longer drying time is recommended.

### INSTRUCTIONS FOR USE

## Substrates preparation:

The substrates to be treated must be clean, dry, free of dust or grease.

Contaminated surfaces must be cleaned beforehand with a solvent-based solution with or without the help of an abrasive like 3M SCOTCH BRITE® RED. Let evaporate for 5 minutes before next step.

Product code : 34024C - Version 6 from 05-05-2023 3 rue Ettore Bugatti - 67500 Haguenau Tél : 03 88 90 60 00 - Fax : 03 88 73 48 38 Internet : http://www.emfi.com - EMail : emfi@emfi.com Writer : CD We preconize to treat the glass with the adhesion promoter ACTIVATOR (see the technical data sheet of the product) before applying PRIMER WS.

Note: when using solvents, extinguish all sources of ignition and carefully follow the safety and handling instructions given by the manufacturer.

Primer application:

To perfectly homogenize the product, shake thoroughly the bottle until agitator ball is moving, then shake additional 30 seconds. Dip a clean felt tip applicator into the bottle, roll it around the edges of the bottle to squeeze out the excess of product.

PRIMER WS can also be applied with the 10 ml tube with foam applicator. Shake thoroughly the tube for 10 to 15 seconds in order to re-homogenize the product. Exert a uniform and light pressure to get a homogenous and opaque film. Hermetically seal the container immediately after use as this product is very sensitive to moisture. Any contact with

humidity will make the primer cure.

Depending on the type of glass, EMFI's recommendations are the following (see also the technical data sheet of the windshield sealant used):

- RAW GLASS: Activator ACTIVATOR / Black primer PRIMER WS / Windshield sealant
- WINDSHIELD WITH CERAMIC FRIT: Anti-silicone treatment / Activator ACTIVATOR / (Black primer PRIMER WS) / Windshield sealant

Bonding can be performed with or without the use of primer. Bonding without PRIMER WS must be performed on a windshield with a ceramic frit ensuring optimal and uniform opacity to UV and not presenting silicone residues.

- PMMA OR POLYCARBONATE WINDOWS: Activator ACTIVATOR or DEGREASER 1001 / Black primer PRIMER WS / Windshield sealant

After drying (15 minutes \* depending on temperature and moisture conditions) apply the sealant within a one-hour deadline, proceeding according to instructions of its technical data sheet.

If the deadline is not respected or if the film of primer is contaminated (dust, etc.) lightly sand the primed surface, remove the dust and re-prime with PRIMER WS.

On the vehicle: a surface treatment with PRIMER WS is recommended on pinch-weld parts scratched during disassembling of the windscreen as well as on areas where traces of rust are visible. After abrasion followed by a cleaning (solvent), apply PRIMER WS with a clean felt tip applicator to stop corrosion. Respect a drying time of 15 minutes \*.

\* If the temperature is below 20°C, a longer drying time is recommended.

# Cleaning:

During the few minutes following the application, it is possible to clean with mineral spirits; beyond that time, it is necessary to use a mixture of methylethylketone and toluene or methylethylketone and xylene.

# LIMITATIONS

Do not use if an increase in viscosity or a cured film on surface are observed.

Do not apply on frozen surfaces.

Do not apply PRIMER WS to the existing trimmed polyurethane bead (windshield replacement).

Do not reuse the felt tip applicator.

Do not re-dip the felt tip applicator in the bottle (pollution).

# CONSUMPTION

Consumption is dependent on the nature of the substrates. Count 80 to 100 ml/m<sup>2</sup> on glass.

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### STORAGE AND SHELF LIFE

In unopened original packaging stored at a temperature between 5 and 25°C: 25 and 200 L drums: 6 months Aluminium bottles and 10 mL tubes: 12 months PRIMER WS should be used during the month following the opening of the bottle. This time is reduced if the packaging remains opened or is not closed properly, and more so if temperature and humidity are high. PRIMER WS in tube is intended for single use only and should be used guickly after opening.

### PACKAGING

30, 250 and 1.000 mL aluminium bottles.10 mL tubes.25 and 200 L drums.Contact us for other packaging options.

#### SAFETY

Professional use. Read the material safety data sheet before use. Wearing safety glasses and gloves mandatory.

users should contact the seller or the manufacturer of the product for additional technical information concerning its use if they think that the information in their possession needs to be clarified in any way, whether for normal use or a specific application of our product.

Our guarantee applies within the context of the statutory regulations and provisions in force, current professional standards and in accordance with the stipulations set out in our general sales conditions.

The information detailed in the present technical data sheet is given by way of indication and is not exhaustive. The same applies to any information provided verbally by telephone to any prospective or existing customer.

The technical data contained herein is based on our present knowledge and experience and we cannot be held liable for any errors, inaccuracies, omissions or editorial failings that result from technological changes or research between the date of issue of this document and the date the product is acquired. Before using the product, the user should carry out any necessary tests in order to ensure that the product is suitable for the intended application. Moreover, all