



#### Autoclave coating

UM FA has been used to coat the inside of an autoclave with the task to protect the metal walls against cavitation and corrosion which is caused by the hot and high pressured steam inside the



#### Preparation

Roughen adhesion surface (enlargement of adhesion area, good anchoring points) and clean chemically (optimum: **DIAMANT cleaner**). The surface has to be dry and within the optimum working temperature range between +5 / +45 °C.

#### Application

##### Mixing

Pour the hardener (comp. B) fully into the resin (comp. A) container. Mix manually using a spatula or by machine (125 rpm for 2 min.) with propeller mixer. Mix until the hardener has mixed well into the tougher resin. Ensure that all the material is removed from the walls and sides of the tin and is mixed properly. After mixing the material should be applied immediately.

##### Applying

Apply a thin adhesion layer, then add the remainder up to the desired layer thickness.

##### Curing

Surfaces are usable in 4 hours for light loading. Completely cured and usable for full loading after 24 hours.

#### Range

#### DIAMANT UM FA

is available in the following versions:

- ◆ UM FA P #1122 paste-like
- ◆ UM FA FL #1042 fluid

#### Typical Applications

- ◆ pump, valve, slider and pipeline coatings
- ◆ container, silo, heat exchanger and autoclave coatings
- ◆ maintenance and repair of all metal parts
- ◆ corrosion protection
- ◆ refurbishment projects

#### Product Description

UM FA is especially developed for the beverage and food industry to restore worn, eroded, corroded or damaged metal surfaces and parts. Bringing them back to full operational use and visual appearance with additional anti corrosion and outstanding technical properties.

#### Properties

- ◆ resistant to chemical and physical attacks
- ◆ machinable like metal: can be filed, scraped, milled, turned, bored, screw cut, polished
- ◆ certified by the German food industry for drinking water applications
- ◆ zero shrinkage, perfectly usable for large areas
- ◆ long pot life, short curing time
- ◆ high mechanical strength

#### Material Selection Criteria

UM FA is a polymer system and consists of the two components resin (comp. A) and hardener (Comp. B), supplied in the correct quantities and ready to mix. No weighing or measuring necessary. The choice is dependent on the required viscosity (fluid or paste).

#### Shelf Life

12 month

#### Pack Sizes

twin pack: 250g, 500g, 1.000g  
complete Service-Box, bulk packs on request

Technical Data	P #1122	FL #1042
Pot Life (+20°C) [Min]	-	45
Cure Time (+20°C) [Std.]	-	24
Specific Weight [g/cm <sup>3</sup> ]	-	1,5
E-Modulus DIN 53457 [N/mm <sup>2</sup> ]	-	~ 4000
Compressive Strength [N/mm <sup>2</sup> ]	-	-
Tensile Strength [N/mm <sup>2</sup> ]	-	-
Bending Strength [N/mm <sup>2</sup> ]	-	-
Shear Strength [N/mm <sup>2</sup> ]	-	19
Impact Strength [N/mm <sup>2</sup> ]	-	-
Hardness [Shore D]	-	80
Temperature Resistance permanent [°C]	-	-30 to +120

All material values are average values and vary due to mixing ratio, material quantity and environmental conditions. The mentioned material values are based on normal conditions (STP) of 20°C (68°F) and 1013mbar.

Certified for the German beverage and food industry and the use with drinking water

