PLASTIFORM

TECHNICAL DATA SHEET

F04 PROTECT



Key information

Shape memory impressions.

Protects against moisture and corrosion.

Absorbs shocks and protects the wrapped part.

Incompatible with dimensional measurement.

Description

Plastiform is a high-precision silicone-based impression material. F04 PROTECT is an encapsulation protection product.
It is a two-component, addition-curing, 1:1 (one to one) mixture, curing without heat build-up or odor.

Technical data

Initial Consistency	Final Consistency	Final Hardness	Max. Removal Constraint	Elongation at break *	Impression resolution **
Fluid	Very Flexible	04 +/- 1 Shore A	N/A	260 %	N/A

Density at 20°C	Temperature of decomposition	Flash point	Boiling point	Ignition temperature
1,04 g/cm³	ND	>130 °C	>300 °C	ND

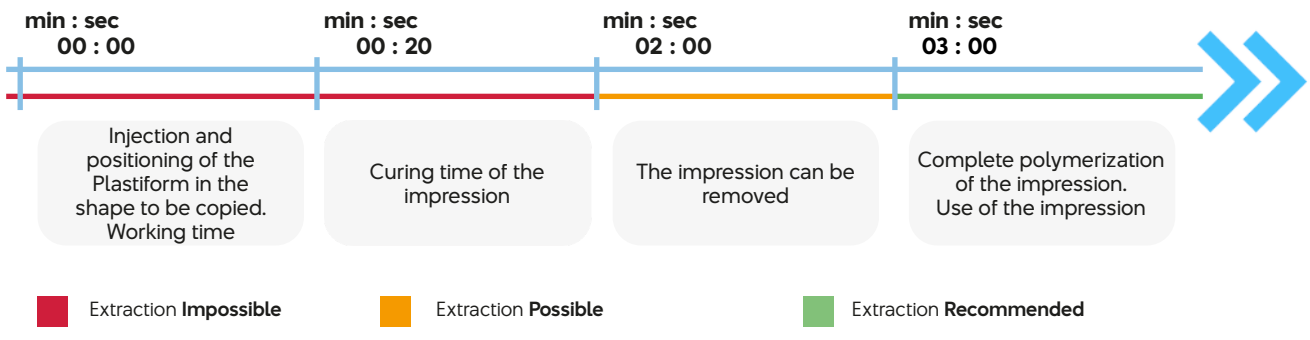
* Elongation at break defines the ability of a material to elongate before breaking when loaded in tension.

** The impression resolution is the smallest variation of the measured quantity that produces a perceptible variation of the indication delivered by the measuring instrument.

ND - Not Determined

Recommended application times (Data at 23 °C / 50 % RH)

It is recommended to wait for complete polymerization before removing and using the impressions.



Evolution of curing time / product temperature

Temperature is a factor with a direct influence on the curing time of Plastiform products. It is recommended to use the products at room temperature (~23°C).

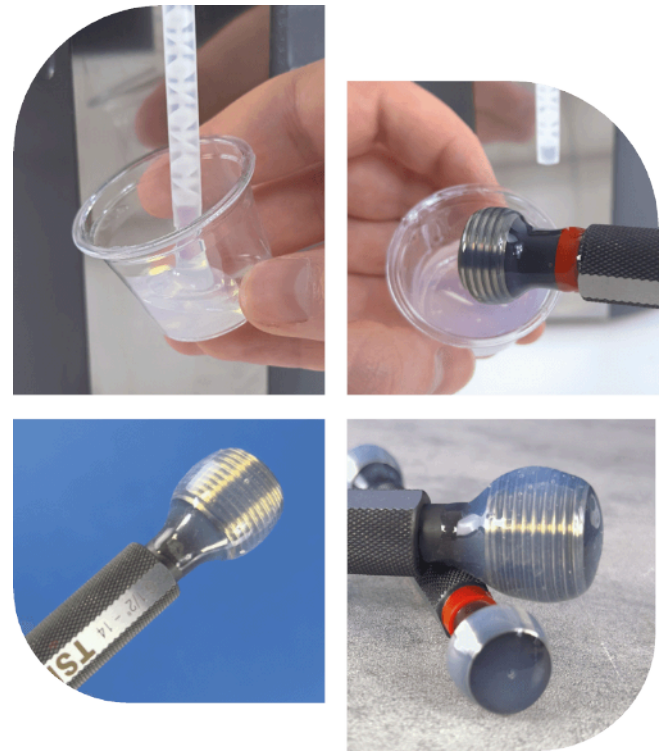
Applications

This product is designed to protect fragile parts and components by enveloping them in a thick protective layer that effectively shields surfaces from impacts. It also provides excellent protection against moisture and corrosion.

It remains fluid for 20 seconds before it begins to harden, forming a highly flexible and durable material.

Once hardened, it reaches its final shape and stays firmly in place, fitting closely to the surface to provide perfect protection and sealing. This makes it easy to use for protecting a large number of parts at the same time.

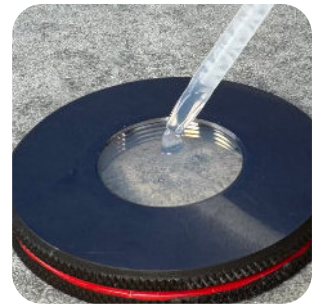
It is important to note that F04 PROTECT is not intended for standard Plastiform applications, as it is a specialized product within the range.



Example of F04 PROTECT use









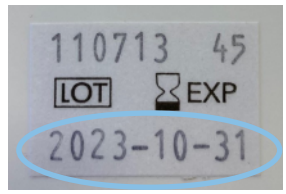
Material compatibility

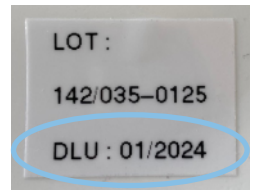
Plastiform can be used on all types of materials. However, an alteration of the chemical reaction of polymerization can occur in contact with latex, sulfur compounds, graphite, oils and greases, as well as certain titanium alloys (non-exhaustive list).
In general, the user is advised to conduct comprehensive tests to determine the suitability, effectiveness and safety of Plastiform for the intended application.

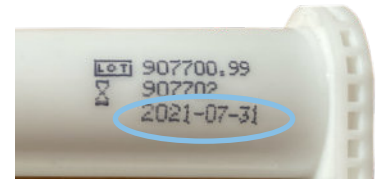
Shelf life / Storage / Conservation

The expiry date of Plastiforms is indicated on the products. It varies between 24 and 36 months (depending on the product) after the manufacturing of the product, if it is kept in its original packaging, well closed, and stored in a dry and temperate environment (between 15 and 25°C).

The expiry Date is indicated on the cartridge or under the jar as follows:







Once the product's validity date has been exceeded, Rivelec no longer guarantees the performance shown on this technical data sheet. It is then up to the user to proceed with tests, in order to determine the adequacy, the efficiency and the safety of Plastiform products with the application he is considering. Nevertheless, Rivelec has been able to confirm the conformity of Plastiform on products manufactured more than 5 years ago, untouched and stored in nominal conditions.

As long as the materials have been stored at room temperature and that the original packaging has not been opened, Rivelec considers that it is safe to use the product up to one year after its expiration date. Rivelec recommends that tests be carried out by the customer before using expired products.
A change in appearance or consistency, or an abnormally long polymerization time, may indicate that the product has deteriorated.

Plastiform's performance can be potentially impaired if the products have been exposed to wide temperature variations or extreme temperatures (< 0 °C or > 55 °C).

In order not to pollute the components and thus alter the homogeneous mixture of Plastiform and the 1/1 ratio of the base and the catalyst, take care not to interchange the caps and to close the cartridges well after use.

Health & Environment

- Plastiforms are **non-toxic** and can be handled without PPE.
- None of the raw materials used in the manufacture of Plastiform products are classified as **CMR** (carcinogenic, mutagenic or toxic for reproduction).
- No Volatile Organic Compounds **(VOCs)** are used as raw materials in the manufacture of Plastiform.
- No substances / raw materials containing substances mentioned in the **REACH SVHC** list in a concentration > 0.1 % are present in the composition of Plastiform products.
- The polydimethylsiloxanes used in the manufacture of Plastiform products contain a maximum of 0.1% of **volatile cyclic siloxanes** D4, D5 and D6.
- No **nanoparticles** are used in the manufacturing of Plastiform products.
- No substance / raw material containing **substances of animal origin** is present in the composition of Plastiform products.
- No **halogenated hydrocarbons** (chlorinated, fluorinated, brominated) are present in elemental form in Plastiform.
- No substance / raw material containing **latex** is present in the composition of Plastiform products.
- Plastiform containers and impressions are classified as **non-hazardous non-inert waste** and more precisely as waste from organic chemical processes under code 07 02 17 "waste containing silicones" (according to annex I of article R 541-8 of the Environmental Code).

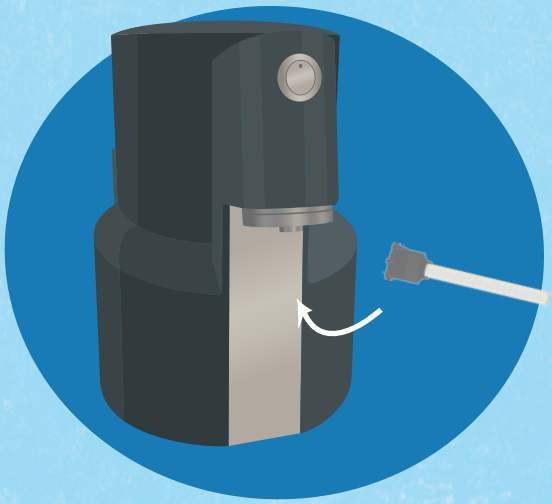
Application example

F04 PROTECT

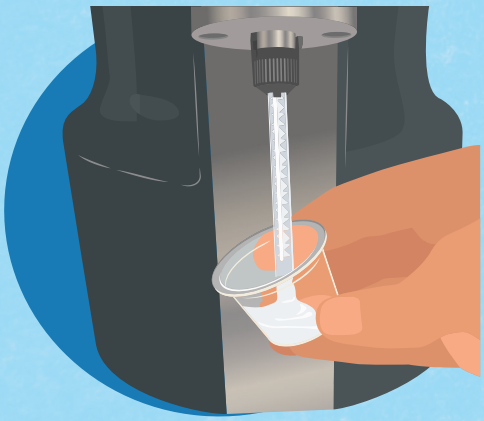
1 Thoroughly clean the part.



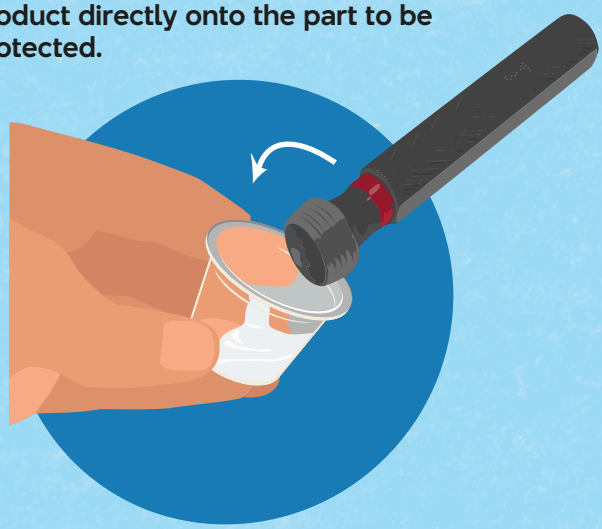
2 Assemble the nozzle on the ProMixR (or mount it onto the cartridge) and place the bottles at the back.



3 Once the ProMixR is connected (or the manual gun is ready), press the front button to dispense the product into a dipping pot.

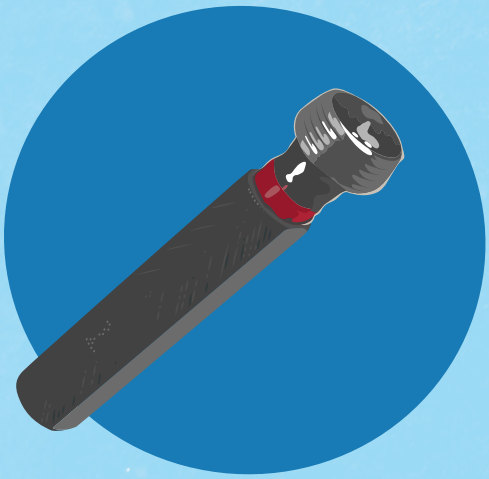


4 Dip the part to be protected into the dispensed product in the pot, or apply the product directly onto the part to be protected.

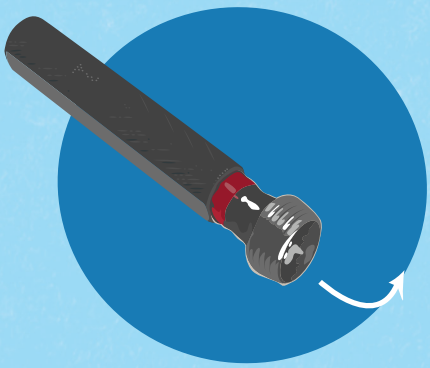


5 Let the product cure for 20 to 30 seconds.

Your part is now protected.



6 Peel off the F04 PROTECT film to remove the protection. Caution: once removed, the protection is no longer airtight.



F04 PROTECT

Available Packaging

F04 PROTECT is available in two different formats:

- 50 ml cartridges: to be used with the Applicator Gun (manual or battery-powered)
- 2 L bottles (2 × 1000 ml): to be used with the ProMixR, an automatic dispensing and mixing machine for the product

Special nozzles are supplied with each kit.



VR-F04P-2X1/300

F04 Protect 2000ml
+ 300 Special Nozzles



CA-F04P-5/40

5x Cartridges 50ml
+ 40 Special Nozzles



CA-F04P-5/80

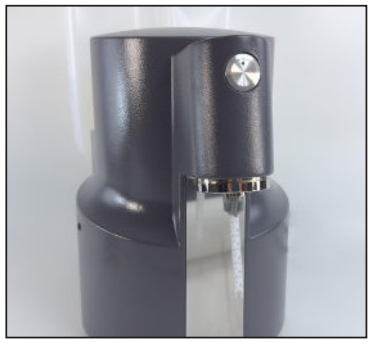
5x Cartridges 50ml
+ 80 Special Nozzles

ProMixR

F04 PROTECT in bottles is used with the ProMixR, an automatic dispensing machine. It ensures accurate dosing and a homogeneous mix of the two components.

Applicator Guns

F04 PROTECT in cartridges can be used with applicator guns (manual or battery-powered), according to preference.



PMIXR

1 ProMixR
+ Pedal Switch



AC-001

1x DM-50



AC-001-B

1x DB-50

The information provided in our data sheets is based on our current knowledge and on the results of tests carried out under specific conditions. These data are in no way intended to establish a specification.
It is the user's responsibility to carry out complete tests under his own responsibility, in order to determine the suitability, efficiency and safety of Plastiform products for his intended application.
Rivelec cannot guarantee the compatibility of a Plastiform product with any application.
Rivelec disclaims all liability for any damage or incident resulting from the use of its products. The warranty conditions are governed by our general sales conditions.