

SURA Hand flaming device FB 07 & FB 25

PYROSIL®



The **PYROSIL® flame treatment devices FB 07** und **FB 25** are sureface silication devices which operate with the flame pyrolysis method. A several nanometers thin silicon dioxide layer on metal, glas , ceramics and plastics is formed, which is tide and strongly adhesive.

The FB25 and the FB07 are designed for manual use and for the silicatisation of surfaces (**PYROSIL® - Coating**) of small and medium sized Parts.

hand flame devices
FB 07 (pen) and FB 25
with PYROSIL® -cartridge

Technical application

For the flame treatment always the non luminous part of the flame (oxydizing flame part) should be used. A flame treatment to any materials with the luminous part of the flame (reductive flame part) has strictly to be avoided. The flame should be moved gently up and down the substrate. Do avoid local overheating.

The optimum treatment time should be estimated by own investigations. It depends on the kind of material to be treated. Usually the treatment time for plastics is shorter than the treatment time for metal, glas or ceramics.

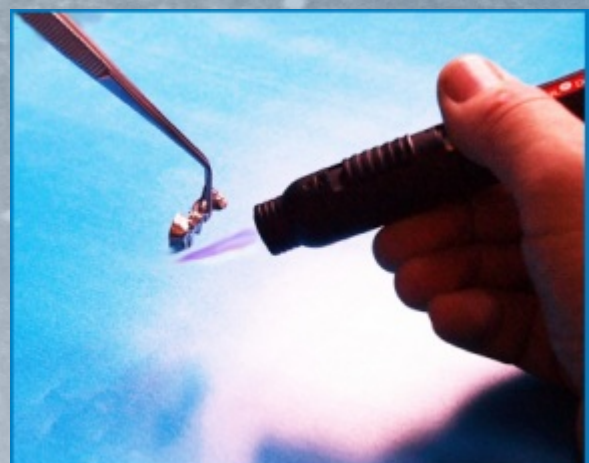
Especially for the last mentioned materials it is favourable to warm them up before the treatment. Material temperatures of 40 to 50°C are sufficient to avoid the formation of condensation water.

Approximately 3-5 seconds are necessary for the treatment of an area of 1 cm with the FB07 (respectively 10 cm for FB 25). For plastics, 1 to 3 flame cycles are sufficient, for metal, glas or ceramics (depended on the velocity of the hand movement) 6 to 12 cycles are sufficient for obtaining the PYROSIL® effect.

The surface activation due to the PYROSIL® coating lasts (in dry air and at temperatures between 22 °C and 25 °C) several weeks. A fast-subsequent treatment within 30 minutes (maximum 12 hours), e. g. an increase of the adhesive abilities with SURALink primer pre treatment, is recommended.



FB 25 set with primer and handling



FB 07 (pen) in use
Device for hand flaming

Refilling

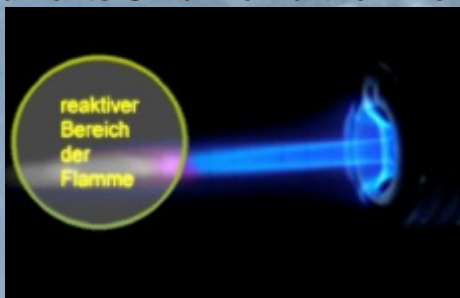
The service life of a filling is about 30 or 45 minutes for the FB 07 and FB 25. The filling should only be carried out with the original PYROSIL[®] that is delivered in cartridges including adapters.



Advices for industrial and health safety

The correct use of **SURA PYROSIL[®] flame equipments** guarantees that no harmful gases or fumes are released. Pay attention on the manufacturer to prevent fire. The use of a fume hood is recommended for longer work.

Caution is needed during the flame pyrolytic surface treatment of PTFT and other fluorine containing polymers. Contact the manufacturer as SURA Instruments GmbH for further information,



Safety and transport precautions

PYROSIL[®] is a propane-butane gas mixture and produces as well as pure propane-butane explosive mixtures with air. Ignition sources of each kind have to be removed, because of a possibility of an accidental ignition. Smoking is strictly prohibited during handling and working with PYROSIL[®].

- * No toxic or harmful reaction products are formed. But, for longer work ensure a good aeration or use an exhausting device.
- * For the transport of PYROSIL[®] - cartridges the safety instructions class 2 Kl.-code 6FF GGVS/ADR have to be met.



PYROSIL[®]

Technical Data

Device	FB 07	FB 25
Size:	160x20 mm	143 x 85 mm
Weight:	57,5 g	157,5 g
Filling volume:	2,8 g	26 g
Service time:	ca. 30 Min.	ca. 45 Min.
without a filling		

Delivery as a set for technical applications - FB 07, FB 25 with PYROSIL[®] -cartridges, primer and handling accessories.

Certificated
EN ISO 9001
11/2001