Factor II, Incorporated

Inventing and Innovating…
(Information: 1.928.537.8387)
ONLINE ORDERING www.factor2.com

PRODUCT INFORMATION
FX-505 MOLD MAKING SILICONE

PRODUCT DESCRIPTION:

Factor II Inc. FX-505 is an excellent two part Silicone Rubber designed for mold making, but is also used as a general purpose, high strength rubber. FX-505 is ideal for casting pressure pads and advanced composite tooling rubber. It is also an excellent mold making material for casting low melting metals in continuous operations of 650ºF.

TYPICAL PROPERTIES AS SUPPLIED:

Ratio: 10/1
Color .....Light Blue
Viscosity, cps.@77ºF.....70,000
Working Time: @77ºF(25ºC).....20-25 min
Shelf Life:.....12 months

Specific gravity at 25°C (77F).....1:25
Hardness: Shore A:.....50+
Tensile Strength, psi.....750
Elongation, %.....320
Tear Strength,ppi,.....85
Linear Shrinkage:.....Nil
Cure Time @77ºF (25ºC).....24 hours

MIXING:

FX-505 Part A and Part B are mixed in a 10:1 ratio by weight. Stir the base Part A well before use. Shake the catalyst container Part B well before use. Care should be taken to minimize air entrapment during mixing. Vacuum deairation at 28 inches Hg is recommended. Apply vacuum to a container at least four times the volume of the material to avoid overflow of the bubbles. Allow the material to reach its maximum capacity, and to fall to the bottom of the container. Continue to hold the vacuum for 3 to 5 minutes. This will eliminate the smaller bubbles. When packing the material into a mold care should be taken to minimize trapping air bubbles.

HIGH TEMPERATURE CHARACTERISTICS:

The FX-505 A/B can be used for continuous operations where temperatures reach up to 500^{0}F. This can include oven curing and/or other operations that would heat soak this compound.
For metal casting applications the FX-505 A/B was tested with molten metal temperatures of 650°F. A 32% Antimony/65% Lead composition was poured into an open mold cavity six times for each test temperature. Talcum powder was used as a mold release agent and the metal was cast on a continuous basis.

INHIBITION:

Certain materials will cause inhibition or neutralization of the curing agent. These materials are sulfur containing and organometallic salt containing compounds such as organic rubbers and many RTV silicone rubbers. Inhibition may easily be determined by brushing a small quantity of FX-505 is gummy or uncured after the curing time, then you know the mold surface is acting as an inhibitor. Molds made from wood, plaster, metal or plastic should not cause inhibition if they are clean, however, to insure against possible problems it is advisable to spray a PVC barrier film release over any questionable surfaces. This is the best way of treating clays and waxes that cause inhibition.

STORAGE AND SHELF LIFE:

Factor II, Inc. FX-505 has a shelf life of 6 months from the date of shipment when stored unopened in the original containers at room temperature, 25C (77F). NOTE: REFRIGERATION IS NOT ESSENTIAL BUT MAY EXTEND THE SHELF LIFE OF THIS MATERIAL.

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