Sona Meta Chem

Adhesive Premix

# Adhesive Premix - SMCP ADP 3011

This adhesive premix is compounded by using the very special Resin/Polymer combination of Sona Meta Chem, With the structure of binders and the high fibrous matrix of the adhesive premix the holding capacity of the back plate and friction material is considerably higher in heavy operating condition (such as higher temperatures, higher shear forces) than traditional glues.

## BENEFIT OVER THE TRADITIONAL GLUES

1. Minimum 25 % higher temperature resistance compared to all organic glues.

2. With the created layer between back plate and the friction material it behaves also as an antinoise shim by changing the resonance frequency from the hearable values to non hearable values.

3. With the created layer between back plate and the friction material it behaves as a heat barrier between the friction material and back plate/actuating piston.

4. If asked for special application “the same premix with increased thermal conductivity) is available with more metallic structure.

5. Shear tests according to ISO 6312 have been performed for hot pressed disc pads and noticed that the shear strength value was always more than 250N/cm2 with 100 % retention, same test have been performed after constant pressure Dyno test (in which at least 5 times the disc pad has been overheated) and noticed that the shear strength value was still more than 250N/cm2 with 100 % retention.

## TYPICAL VALUES OF SHEAR TEST

AT ROOM TEMPERATURE

SHEAR FORCE : 90 kg /cm $^2$
ADHESION : 100 %

HOT SHEAR

SHEAR FORCE : 20 kg /cm
ADHESION : > 80 %

## Application

1. To start with use minimum 0.3 gm/cm2 of friction surface (for passenger car pad application) and 0.4 gm/cm of friction surface (for CV pad application) and create a layer of adhesive premix. (see photo above)

2. With trial and error the weight of the premix can be obtained accordingly. If the thickness variation is not so good on some application (like automatic feeding system) pay attention not to have minimum 1 mm thickness on uneven thickness.

3. The Back plate should be shot blasted, degreased and away from dust (Same as in application of traditional glues)

4. Suitable for all traditional hot press curing systems process parameters such as temperature, pressure, time etc.

5. No need for any extra pressure during the post baking of the pads (loose post baking can be applied)