



ND Specialty Coating Technical Data Sheet SC503 (SC13-06)

Description: SC 503 (SC13-06) is a water-borne, lubricating dry film coating for fasteners. SC13-06 reduces the friction generated between the mating pieces in fastener applications. SC13-06 offers the advantage of reducing the torque required for installing self-tapping fasteners. The material can also be used to help reduce galling and part seizure during application.

Typical Properties:

Appearance:	Milky white
Brookfield Viscosity (ASTM D1084-97, B)	< 50 cPs
#2 Zahn Viscosity (ASTM D1084-97, D)	20-23 seconds
% Solids by Weight (ASTM D2369-98)	10-15%
Specific Gravity (ASTM D1875-95)	0.99 - 1.11
Torque-Tension (ASTM D5648-94)	0.13
K Value (3/8 x 16 x 1.25" dry zinc phosphate coated steel nuts and bolts) K value = torque / (tension x bolt diameter)	

Application Method: Dip and drain, dip and spin, or flood methods would be suitable application choices.

Mixing Instructions: The material should be mixed prior to use until a uniform consistency is achieved. Care should be taken as to avoid foam generation due to excessive agitation. Upon first use, the material should be mixed for 15 minutes. If the material sits for more than a four-hour time period, the material should also be mixed for a minimum of 15 minutes. For shorter amounts of inactivity, 5 minutes mixing should be sufficient.



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ND Industries recommends that the material be used as supplied, however if a viscosity adjustment is needed, a modest amount of deionized water may be added under slow agitation. The material should be reduced by no more than 2 seconds at a time in order to avoid over thinning the material.
(Contact ND Technologies Group for further information.)

Dry Schedule: The coated parts may be dried at 70 °C (158 °F) for 10 minutes. Do not expose parts to temperatures greater than 110 °C (230 °F).

Shelf Life/ Stability: The shelf life of SC13-06 is 12 months under ideal storage conditions. Protect from freezing.

Special Note: The data contained on this data sheet is believed to be reliable. However, since actual conditions may vary, testing should be conducted by the user to determine suitability for their particular application.