



Technical Data Sheet

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RO-59 TM-4

Product Description:

A chemically bonded RO-59 TM-4 coating provides significantly better lubricity and reliability than Vydax and non-bonded PTFE coatings. They also provide significantly better lubricity and durability than RO-59 TM-8 coatings but with some sacrifice in cosmetic appearance.

Use:

Deposit thin, dry, PTFE lubricant coatings on metallic and non-metallic surfaces. These coatings chemically bond to the substrate either at ambient or slightly elevated temperatures and are functional from well below 32°F to 550°F and higher.

Composition:

RO-59 products are environmentally safe. They are water based with no VOCs. Also, they are nonflammable, do not affect the ozone layer and do not contribute to the greenhouse effect.

Handling:

Please be sure to read the SDS and follow all precautions including appropriate PPE necessary to handle this product safely. Keep tightly sealed while not in use. Mix well before use, and verify the material is homogenous.

Avoid freezing the product and make sure the material is at ambient temperature prior to use.

Instructions for Use:

Dilution:

Dilute 1 gallon of RO-59 concentrate with 3 gallons of reverse osmosis (RO), distilled, or deionized (DI) water. Do not use softened water.

Cleaning:

A clean and dry surface is necessary to ensure proper bonding and functionality of the RO-59 coating. A clean metallic surface and completely free of organic contamination is indicated by complete and uniform wetting of the surface by water with no dry spots and no beading or streaking by the water.

Application:

By dipping, spraying, wipe-on etc. Whatever the method, a sufficient amount of TM-4 should be applied to ensure the complete and uniform wetting of the substrate with no dry spot formation.

A quick air dry (minutes) after application is necessary to effect proper cosmetic appearance. Proper bonding of the coating is ensured either by continuing the air dry for several hours (overnight, preferably) or by following the quick air dry with heating at a mildly elevated temperature (160°F - 200°F) for about 30 minutes in an oven, hot room, hot air blower, or infrared.

Cosmetically acceptable coatings are more likely to form by orienting the coated substrate in a vertical position to allow drainage. A second coating thickness to improve wear resistance and possibly to improve cosmetics is done by application + quick air dry (1 to 2 minutes) for the first coating followed by reapplication + quick air dry for the second coat + final 160°F-200°F heating.

Test the RO-59 coated surface for lubricity by rubbing with a paper towel. A smooth feel indicates the presence of a low friction coating.

FEATURES:

Water based	No VOCs
Non-flammable	Large functional temperature range
Easy Application	Appropriate with metallic and non-metallic substrates