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Date	June 2, 2003	Ref.	
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Re	J&L Gasoline and Brake Fluid Immersion Tests		

Abstract:

Two Neukote™ coated Type 409 Stainless Steel samples were submerged 50% in gasoline or brake fluid for one year at room temperature. No damage to the coating was found in the submerged or non-submerged regions.

Experimental Procedure:

Two Type 409 Stainless Steel samples were coated with Neukote™ on both sides and placed in separate containers. One container was filled with DOT-3 brake fluid until 50% of the sample was immersed. The other container was filled with regular unleaded fuel (87 octane) until 50% of the sample was immersed. Both containers were sealed and placed in a room temperature (20-25°C) environment for a period of one year. Both samples were removed and examined for blistering of the coating to the base metal and sectioned for SEM evaluation.

Results:

Visual examination revealed no blistering or removal to the base metal. No signs of damage were found. A representative SEM photograph of each sample is shown below in Figures 1 to 4.

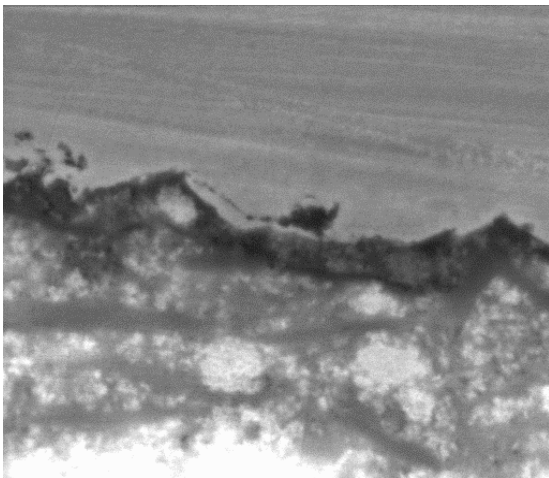


Figure 1 - Neukote™ – not submerged in brake fluid (8200x), coating thickness of 1.0 mils.

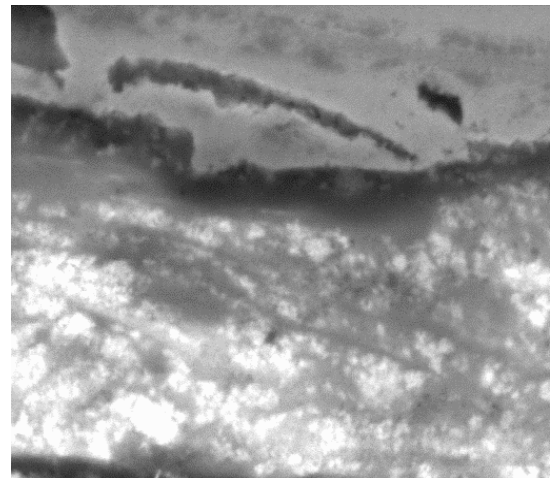


Figure 2 - Neukote™ – submerged in brake fluid (8200x), coating thickness of 1.0 mils.

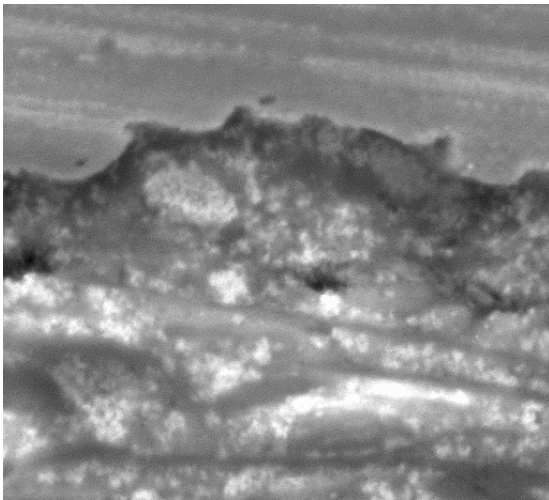


Figure 3 - Neukote™ – not submerged in gasoline (8200x), coating thickness of 1.1 mils.

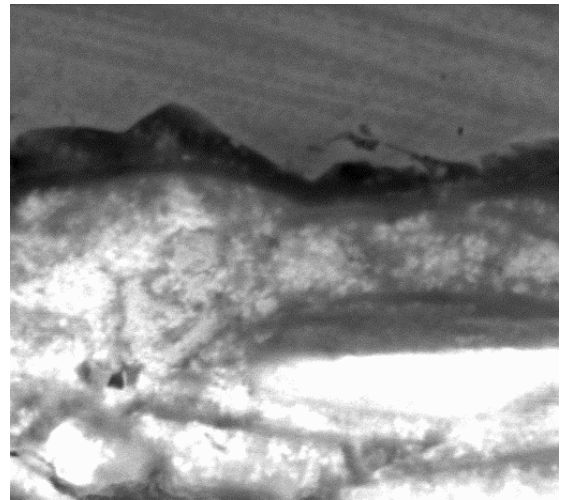


Figure 4 - Neukote™ – submerged in gasoline (8200x), coating thickness of 1.1 mils.

Conclusion:

Neukote™ coated stainless steel is resistant to gasoline or brake fluid when exposed for one year at room temperature.

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