Technical Information



Typical Properties

Appearance	Clear liquid
Active Ingredient	55%
Viscosity @ 25°C, cp	2
Density @ 23°C	0.918
Reflective Index	1.387
Ph Value (1% v/v solution in water)	4.5

Product Description

Nanosil[®] 6606 is a film forming clear liquid of nano silica dispersion. It is designed for use as an additive to impart surface hardness, scratch resistance and promote adhesiveness for all types of coatings. Due to its excellent transparency and compatibility, it is best suited for clear coats and top coats. It enhances performance of coatings under severe conditions.

Nanosil[®] 6606 also improves the general surface characteristics in film strength, thermal stability, UV resistance and good weatherability.

Supercede Conventional Additives for Enhancing Hardness And Scratch Resistance.

Conventional additives i.e glass powder, polyethylene wax and colloidal silica used for increasing coating film hardness and scratch resistance have their inherent disadvantages.

The most common noticeable inherent disadvantages are:

- 1) Substantial amount of additive needs to be added to effect realistic performance.
- 2) Affect the transparency of coating film
- 3) Being powdery or milky white liquid slurry, relatively big particles size and higher density, it creates difficulties in dispersion within the coating systems.
- 4) Causes sediment when viscosity of coating reduced.

With Nanosil[®] 6606, a crystal clear liquid dispersion, not only eliminates all the short comings conventional additives encountered but actually imparts further enhancements.

- 1) Only small dosage of 1-2% needs to be added to increase the hardness and scratch resistance.
- 2) Instead of affecting the transparency, it actually increased the glossiness of the coating surface.
- 3) It fully compatible and easily be blended into coating systems.
- 4) No Sedimentation.

Incorporation Procedure

Nanosil[®] 6606 is used as an additive (at approximately 1 - 2% by weight of the total coating formulation) in the preparation of a variety of coating systems.

It is always recommended that Nanosil[®] 6606 to be added at the let down stage of the coating systems. If it has to be added, for some circumstances, during the premix stage, due to its concentration, it has to be first mix with the solvent portion of the coating formulation in order to be thinned down prior mixing with the polymers / resins.

In its concentrated form its acidity is relatively high, never use a metal container to store Nanosil[®] 6606. Once it is added to the coating systems at appropriate level, it becomes totally inert and the final coating systems have full compatibility with all metals and other substrates, and protruding its excellent enhancement properties that others cannot match.

Disclaimer: The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Nanosil's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

NANOSIL (ASIA PACIFIC) SDN BHD SPECIFICALLY DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

NANOSIL (ASIA PACIFIC) SDN BHD DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.