



## CTA Products Group

6915 Crumpler Blvd.

Suite B # 130

Olive Branch, MS 38654

Phone: 901-647-6909

e-mail: [Info@ChemTch.com](mailto:Info@ChemTch.com)

## NBS 30 Effect in Coatings

The object of this testing is to study the effect of adding NBS 30 (according to instructions listed on the NBS 30 label) to various types of exterior coatings. Tests were performed comparing products **with and without** the NBS 30 addition.

The two broad categories tested are water borne and solvent borne. Within these two groups, coatings are generally divided into gloss versus flat, but can vary by many parameters including color, types and volumes of pigments, types and percent of resin, flow control additives, viscosity modifiers, dispersants, wetting agents, and adhesion promoters among just a few. NBS 30 has been tested in a wide variety of paints and coatings to date. Typical results are charted below.

The exterior paints/stains tested represent gloss and flat, oil based and water based paints/coatings. All paints were pure white. The coatings were tested for dry time, overall appearance, color, hide, and stability. All tests, except for stability, were performed on a standard opacity chart using a 0.003" draw-down blade

	Oil Based Gloss	Oil Based Flat	Water Based Gloss	Water Based Flat
Appearance	Unchanged	Unchanged	Flattened	Unchanged
Color	Unchanged	Unchanged	Unchanged	Unchanged
Hide	Unchanged	Unchanged	Unchanged	Unchanged
Stability	Stable	Stable	Stable	Stable

As can be seen, with the exception of the **high** gloss water-based paint, the NBS 30 had no discernible effect on any of the coatings tested. The high gloss water-based paint was significantly flattened by the NBS 30, producing a finish more appropriately described as a semi-gloss. Therefore, when NBS 30 is added to any water-borne coating where the highest gloss is desired, we caution that gloss will be significantly reduced.

Stability was observed at one month by keeping samples in glass jars. Paints containing NBS 30 showed no separation over and above what was observed in the control paints and viscosities were stable through the observation period.

The dry times were recorded with a standard circular recorder using the same charts and draw-down blade described above. Time is in minutes.

	<b>Oil Based Gloss</b>	<b>Oil Based Flat</b>	<b>Water Based Gloss</b>	<b>Water Based Flat</b>
Without NBS 30	<b>Avg. 110</b>	<b>Avg. 95</b>	<b>Avg. 50</b>	<b>Avg. 45</b>
With NBS 30	<b>Avg. 185</b>	<b>Avg. 120</b>	<b>Avg. 60</b>	<b>Avg. 55</b>

As can be seen, the dry time of the water-based coatings were hardly effected at all by the addition of the NBS 30, whereas the oil-based paints were noticeably slower. This was especially true of the high gloss oil-based material. However, it is our strong feeling that this is not an issue in real world situations, and in cases where paints are applied to porous substrates, such as wood, the dry time will not be extended by the degree noted above.