

## **SURFONIC® 3620 Dispersant**



SURFONIC® 3620 Dispersant is a low Volatile Organic Compound (VOC), 60% actives, universal pigment dispersant for aqueous pigment dispersion. It combines charge and steric stabilization methods to easily disperse organic, inorganic, and carbon black pigments.

#### **Recommended Use Levels**

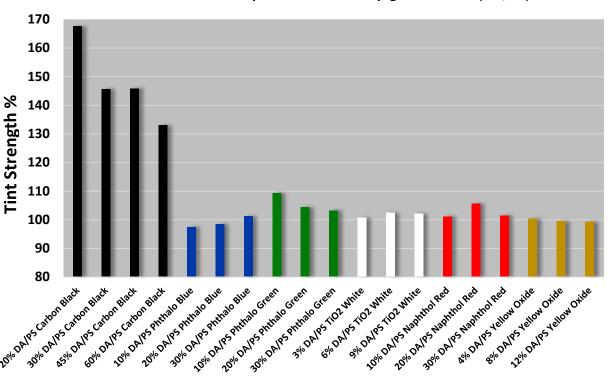
Pigment Type	Dispersant Actives on Pigment Solids	As Supplied on Pigment Solids
Organic Pigments	5% - 40%	8% - 65%
Inorganic Pigments	3% - 12%	5% - 20%
Extender Pigments	1% - 5%	1.5% - 8%
Carbon Black Pigments	20% - 60%	30% - 100%

#### **Tint Strength Results**

SURFONIC® 3620 Dispersant versus a commercial standard was tested for tint strength with 6 commercial pigments:

- Carbon Black (Pigment Black 6)
- Phthalocyanine Green (Pigment Green 7)
- Titanium Dioxide (Pigment White 6)
- Phthalocyanine Blue (Pigment Blue 15:2)
- Naphthol Red (Pigment red 188)
- Yellow Iron Oxide (Pigment Yellow 42)

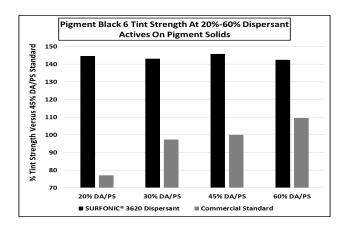
# Tint strength of SURFONIC® 3620 Dispersant versus a commercial standard at the same level of dispersant actives on pigment solids (DA/PS)

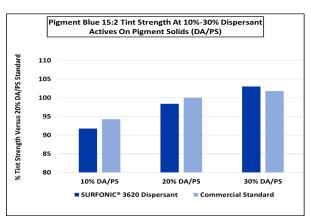


### Carbon Black Pigment (Pigment Black 6) Results

Formula				
Dispersant Actives on Pigment Solids (DA/PS)	20%	30%	45%	60%
Units	%	%	%	%
DI water	70.63	68.00	61.79	57.00
SURFONIC® 3620 Dispersant as supplied	7.37	10.00	15.71	20.00
Silicone based defoamer	2.00	2.00	2.50	3.00
Pigment Black 6	20.00	20.00	20.00	20.00
Total	100.00	100.00	100.00	100.00
Weight of sample (grams)	35.00	35.00	35.00	35.00
Beads / media (grams)	60.00	60.00	60.00	60.00
Pigment in Formula (%)	20.00%	20.00%	20.00%	20.00%







### Phthalocyanine Blue Pigment (Pigment Blue 15:2) Results

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Formula				
Dispersant Actives on Pigment Solids (DA/PS)	10%	20%	30%	
Units	%	%	%	
DI water	62.50	56.79	51.07	
SURFONIC® 3620 Dispersant as supplied	5.00	10.00	15.00	
Silicone based defoamer	2.50	3.21	3.93	
Pigment Blue 15:2	30.00	30.00	30.00	
Total	100.00	100.00	100.00	
Weight of sample (grams)	35.00	35.00	35.00	
Beads / media (grams)	60.00	60.00	60.00	
Pigment in Formula (%)	30.00%	30.00%	30.00%	

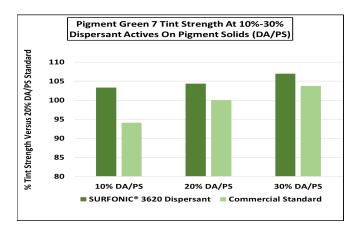


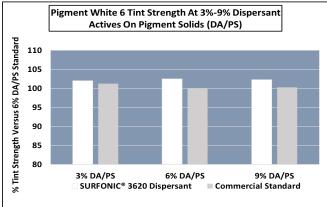


### Phthalocyanine Green Pigment (Pigment Green 7) Results

Formula			
Dispersant Actives on Pigment Solids (DA/PS)	10%	20%	30%
Units	%	%	%
DI water	62.21	56.79	51.07
SURFONIC® 3620 Dispersant as supplied	5.00	10.00	15.00
Silicone based defoamer	2.79	3.21	3.93
Pigment Green 7	30.00	30.00	30.00
Total	100.00	100.00	100.00
Weight of sample (grams)	35.00	35.00	35.00
Beads / media (grams)	60.00	60.00	60.00
Pigment in Formula (%)	30.00%	30.00%	30.00%







### Titanium Dioxide Pigment (Pigment White 6) Results

Formula			
Dispersant Actives on Pigment Solids			
(DA/PS)	3%	6%	9%
Units	%	%	%
DI water	24.50	20.50	16.50
SURFONIC® 3620 Dispersant as supplied	3.50	7.00	10.50
Silicone based defoamer	2.00	2.50	3.00
Pigment White 6	70.00	70.00	70.00
Total	100.00	100.00	100.00
Weight of sample (grams)	60.00	60.00	60.00
Beads / media (grams)	0.00	0.00	0.00
Pigment in Formula (%)	70.00%	70.00%	70.00%

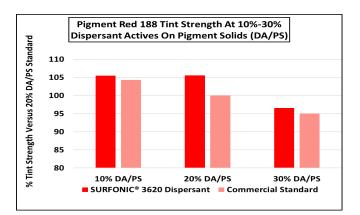


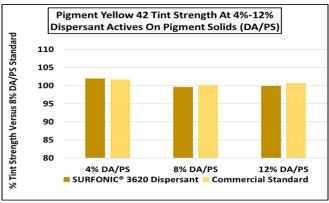


### Naphthol Red Pigment (Pigment Red 188) Results

Formula			
Dispersant Actives on Pigment Solids (DA/PS)	10%	20%	30%
Units	%	%	%
DI water	69.33	64.67	60.00
SURFONIC® 3620 Dispersant as supplied	4.17	8.33	12.50
Silicone based defoamer	1.50	2.00	2.50
Pigment Red 188	25.00	25.00	25.00
Total	100.00	100.00	100.00
Weight of sample (grams)	35.00	35.00	35.00
Beads / media (grams)	60.00	60.00	60.00
Pigment in Formula (%)	25.00%	25.00%	25.00%







### Yellow Iron Oxide Pigment (Pigment Yellow 42) Results

Formula				
Dispersant Actives on Pigment Solids (DA/PS)	4%	8%	12%	
Units	%	%	%	
DI water	35.20	29.50	25.00	
SURFONIC® 3620 Dispersant as supplied	4.00	8.00	12.00	
Silicone based defoamer	0.80	2.50	3.00	
Pigment Yellow 42	60.00	60.00	60.00	
Total	100.00	100.00	100.00	
Weight of sample (grams)	60.00	60.00	60.00	
Beads / media (grams)	0.00	0.00	0.00	
Pigment in Formula (%)	60.00%	60.00%	60.00%	







#### **About Indorama**

Indorama Ventures is a world-class chemical company and a global integrated leader in PET and fibers serving major customers in diversified end-use markets. Following our core strategies, we develop innovative products for customer needs and to make great products for society. Headquartered in Bangkok, Thailand, Indorama Ventures has operating sites in 31 countries on five continents – in Africa, Americas, Asia, Europe & Eurasia.

#### **Integrated Oxides & Derivatives**

Indorama Ventures Oxides & Derivatives is a leading chemical intermediates and surfactants producer with a diverse range of products in growth markets such as home & personal care, agrochemicals, oilfield technologies, fuel & lube additives and more.

In January 2020, Indorama Ventures Public Company Limited completed its acquisition of Huntsman's world-class integrated oxides and derivative business, including:

- Surfactants: Integrated producer of a wide range of products for home and personal care, oilfield technologies, agriculture and process industries.
- Ethylene and Derivatives: Highly integrated manufacturer of ethylene, ethylene oxide, ethylene glycol, ethanolamines and other derivatives.
- Propylene Oxide & Derivatives: Highly competitive technology offerings in propylene glycol, methyl tertiary butyl ether (MTBE) and other derivatives.

Our operating sites include a large flagship site on the US Gulf Coast (USGC) at Port Neches, as well as Chocolate Bayou, Dayton and Clear Lake in Texas, Lake Charles, Louisiana, Ankleshwar, India and Botany, Australia.

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