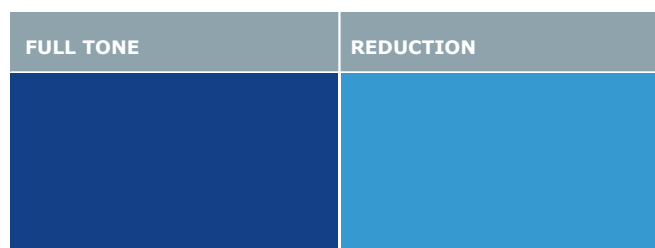


PRODUCT DESCRIPTION	
Chemical Characterization	Cobalt Aluminate Blue Spinel
Color Index	Pigment Blue 28
C.I. No.	77346
CAS No.	1345-16-0
Relative Hiding Power [%]	65

PHYSICAL DATA		
Appearance	Blue Powder	
Density [g/cm ³]	4.1	acc. to DIN EN ISO 787/10
Bulk Density [g/cm ³]	0.5	acc. to DIN EN ISO 787/11
Tamped Density [g/cm ³]	1.0	acc. to DIN EN ISO 787/11
Oil Absorption [ml/100g]	30	acc. to DIN EN ISO 787/5
Water Soluble Salts [%]	< 0.5	acc. to DIN EN ISO 787/3
Moisture [%]	< 0.5	acc. to DIN EN ISO 787/2
pH	7.5 - 9	acc. to DIN EN ISO 787/9
Sieve Residue on 45 µm [%]	< 0.1	acc. to DIN 53195
Av. Primary Particle Size [µm]	0.2	acc. to ISO 13320-1
Total Solar Reflectance [%] ⁵⁾	47	DIN EN ISO 410

CHEMICAL INVENTORY LISTING STATUS
All ingredients are listed in the following national chemical inventories:
AICS (Australia), DSL (Canada), ECL (Korea), EINECS [Europe], IECSC [China], MITI [Japan], NZIOOC (New Zealand), PICCS (Philippines), TSCA [USA]



FASTNESS PROPERTIES		
Heat Resistance [°C]	600	AA10/CIC/104
Solvent Resistance ¹⁾	5	
Acid Resistance ²⁾	5	
Alkali Resistance ²⁾	5	
Light Fastness [Full Shade] ³⁾	8	
Weather Fastness [Full Shade] ⁴⁾	5	

REGULATIONS	
Germany BfR recom. IX	compliant
APME AP 89/1	compliant
USA (FDA) 21 CFR § 178.3297	listed
Toys Europe EN 71-3	compliant
Toys USA ASTM F 963-03	compliant
CONEG, EC 94/62	compliant
ROHS, 2002/95/EC, 2005/618/EC	compliant
End of Life Vehicles, 2000/53/EC, 2002/525/EC	compliant

STANDARD PACKAGING
- 20 kg Paper Bags
- Different types of packaging are available on request

1) Pigments were dipped into solvent. Assessment with Grey Scale according to DIN 54002. Rating: 1=severe, 5=none.

2) Pigments were dipped into hydrochloric acid (10%) or sodium hydroxide solution (10%). Rating: 1=poor, 5=excellent.

3) Light fastness was tested in an alkyd/melamine system. Assessment with Blue Wool Scale according to DIN 54003. Rating: 1=very poor, 8=outstanding.

4) Weathering fastness was tested in an waterborne acrylic resin system. Assessment with Grey Scale according to DIN 54001 after 2000h accelerated weathering (Arc Xenontest acc. to DIN EN ISO 11341-1-A, 1998). Rating: 1=poor, 5=very good.

5) Powder pellet