

# Sudatherm™ Tan 6416K

Pigment for Plastics

### Product Description

Sudatherm Tan 6416K is a brown (tan) colored spinel CICIP (Zinc Iron-based) pigment. It offers high color depth, easy dispersion and excellent fastness properties. It is suitable for high pigment loading in SPC masterbatches.

### Product Information

<b>Chemical Type</b>	ZnFe <sub>2</sub> O <sub>4</sub>	<b>CAS NO.</b>	68187-51-9
<b>C. I. Name</b>	Pigment Yellow 119	<b>EINECS / ELINCS NO.</b>	269-103-8
<b>C. I. Constitution No.</b>	77496	<b>Physical Appearance</b>	Light brown powder

### Application Profile

Polyolefins	●	PP	●
Polystyrene	●	Nylon	--
PVC & PVC Leather Cloth	●	PET	--
EVA	●	PBT	--
ABS	●	PC	--

● Recommend | ○ Potential Use | -- Not recommended

### Technical Performance

Heat Stability	Fastness to Bleeding in LDPE		Full Shade
260°C	5	Weather Resistance	5
		Light Fastness	8

### Physical Properties

Oil Absorption	26 ± 10%	Resistance to Acid	5
Specific Gravity	4.80 ± 0.1	Resistance to Alkali	5
Bulk Density (g/ml)	0.82 ± 0.1	Fastness to Bleeding in PVC-P	5
pH Value	4 - 6	Specific Surface Area (m <sup>2</sup> /g)	-
Volatile Matter	1% max	Mean Particle Size (nm)	0.60
ROS (325 mesh)	0.1%	Conductivity (µS/cm)	549

- ✓ **Light fastness:** The fastness to light be determined on injection molded plastic swatches of approximately 2 mm thickness. Test swatches exposed in QUV and the visual rating given on 1 to 8 Blue Wool scale where 1 = 'Poor' and 8 = 'Excellent'.
- ✓ **Weather fastness:** The fastness to weather is determined on injection molded plastic swatches of approximately 2 mm thickness. Test swatches exposed in Xenon Arc for 1000 hrs and the visual rating given on 1 to 5 Grey scale where 1 = 'Poor' and 5 = 'Excellent'.
- ✓ **Heat stability:** The heat stability is checked as per oven test method where pigment sample is kept in oven at 500 degrees for 15 min and then, checked against untreated sample in plastic application to assess the change in color (DE<3.00).
- ✓ **Oil absorption:** The oil absorption is determined on the basis of EN ISO 787-5 and given in g linseed oil per 100 gm. pigment.
- ✓ **Bleeding fastness:** The fastness to bleeding in PVC-P is determined on a colored PVC film in contact with a white-pigmented PVC film in an oven at 140°C for 2 hrs and the visual rating given on 1 to 5 Grey scale where 1 = 'Poor' and 5 = 'Excellent'.

Disclaimer –

The information given in this data sheet is based on the present state of our knowledge & is intended as a general description of our products & their possible applications. Neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Because of the multitude of formulations, production & application conditions, all the above mentioned data have to be adjusted to the circumstances of the processor. No liabilities, including those for patent rights, can be derived from this fact for individual cases. It cannot be ruled out that this product contains particles < 0.1 µm. Any user of this product is responsible for determining the suitability of Sudarshan's products for its particular application & to ensure that any proprietary rights & existing laws & legislation are observed.