

Product Data Sheet

SIDISHIELD® C25

1. Product Description

SIDISHIELD® C25 is a specially designed light-coloured coating additive consisting of spherical, submicron particles of amorphous silicon dioxide. The nature of the product allows excellent dispersion of these particles in the coating polymer matrix and combined with the low surface area it is possible to achieve higher solid content coatings, maintaining good levelling properties with abrasion and scratch resistance.

2. Application

SIDISHIELD® C25 has been designed for usage in all types of coating systems: solvent free, waterborne, and solvent based, including UV and powder coatings. SIDISHIELD® C25 can, due to its hardness and physical shape, act as a dispersing agent and is also used as a spacer in pigment concentrates. Recommended addition level is 1 - 2% of total formulation.

3. Packing

The product is available in big bags as well as in LDPE small bags.

Description	Big Bags	Small Bags
Bags on pallet	1 big bag	30 small bags
Net weight 1 bag	300 kg	15 kg
Net weight on pallet	300 kg (661 lb)	450 kg (992 lb)
Gross weight	320 kg (705 lb)	470 kg (1036 lb)
Bag dimensions (L x W x H)	106 x 106 x 142 cm (41.7 x 41.7 x 55.9 in)	73 x 46 x 20 cm (28.7 x 18.1 x 7.9 in)
Discharge spout	Ø: 42 cm (16.5 in) Length 70 cm (27.6 in)	
Bag material	Coated woven polypropylene fabric	LDPE bag
Cover / protection	LDPE shrink hood	LDPE shrink hood
Pallet	Fumigated wood	Fumigated wood
Pallet dimensions incl bags (L x W x H)	105 x 105 x 143 cm (41.3 x 41.3 x 56.3 in)	114 x 114 x 156 cm (44.8 x 44.8 x 61.4 in)

4. Storage Conditions

The product is recommended to be stored in a covered dry place, protected from direct UV light. Recommended storage temperature between +5 °C and +40 °C (+45 °F and +104 °F). It's important that the minimum temperature is > 5 °C (9 °F) above the dew point. Recommended relative humidity < 85 %.

5. Shelf Life

We recommend that the product should be used within 2 years from production date.

6. Health, Safety and Environment

The product safety information, as well as REACH information, can be found on our website: www.sidistar.com.

7. Additional Information and contact

For further information about SIDISTAR®, a contact list can be found on our webpage www.sidistar.com. You are also welcome to send your questions to us by email: info@sidistar.com

8. Test Methods

Material data given in this product specification refer to analysis according to Elkem internal standard test methods, which are available upon request.

9. Version / Updates

The information on this product specification may be subject to change. Please check our website www.sidistar.com, for latest updates, and discard all older versions.

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10. Physical Data and Chemical Properties

Properties	Test Method	Unit	Limits:
SiO ₂ (<i>Silicon dioxide, amorphous</i>)	ESM-LAB-18	%	96.0 – 99.0
Fe ₂ O ₃ (<i>Iron oxide</i>)	ESM-LAB-17	%	≤ 0.20
H ₂ O (<i>Moisture, when packed</i>)	ESM-LAB-02	%	≤ 0.8
Loss on Ignition (<i>L.O.I.</i>) @ 950 °C	ESM-LAB-03	%	≤ 0.50
pH-value (<i>fresh</i>)	ESM-LAB-10		7.0 – 9.0
Bulk Density (<i>when packed</i>)	ESM-LAB-08	kg/m ³	150 - 350

Other Properties (<i>measured on undensified material</i>)		Typical Values**
Specific surface area (<i>BET</i>)	m ² /g	18 - 25
Median particle size	µm	0.15
L-Value		≥ 90.0
Specific Gravity	g/cm ³	2.2
Oil number	g/100g	60

** Typical values are for indicational use only, values are not part of Elkem Silicon Materials standard analysis.

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