

Product data sheet

SIDISHIELD® C25

Elkem ASA Silicon Products
 Drammensveien 169 P.O. Box 334
 Skøyen NO-0213 OSLO
 www.elkem.com

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.

Applications 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.

Chemical analysis & physical data

Properties	Test Method	Unit	Limits
SiO ₂ (<i>Silicon dioxide, amorphous</i>)	ESM-LAB-18	%	96.0 - 99.0
C (<i>Carbon</i>)	ESM-LAB-05	%	≤ 0.2
Fe ₂ O ₃ (<i>Iron oxide</i>)	ESM-LAB-17	%	≤ 0.25
H ₂ O (<i>Moisture, when packed</i>)	ESM-LAB-02	%	≤ 0.8
Loss on Ignition (L.O.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
Properties (<i>measured on undensified material</i>)	Test Method	Unit	Typical Values**
Specific surface area (<i>BET</i>)		m ² /g	20 - 30
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.

Product data sheet

SIDISHIELD® C25

Elkem ASA Silicon Products
 Drammensveien 169 P.O. Box 334
 Skøyen NO-0213 OSLO
www.elkem.com

Packaging

	1 big bag	30 small bags
Bags on pallet	1 big bag	30 small bags
Bag material	Coated woven polypropylene fabric	LDPE bag
Cover / protection	LDPE shrink hood	LDPE shrink hood
Pallet	Fumigated wood	Fumigated wood

Dimensions (metric)

Net weight 1 bag	300 kg	15 kg
Net weight on pallet	300 kg	450 kg
Gross weight	320 kg	470 kg
Bag dimensions (L x W x H)	106 x 106 x 142 cm	73 x 46 x 20 cm
Discharge spout	Ø: 42 cm, Length 70 cm	
Pallet dimensions incl bags (L x W x H)	105 x 105 x 143 cm	114 x 114 x 156 cm

Dimensions (imperial)

Net weight 1 bag	661 lb	33 lb
Net weight on pallet	661 lb	992 lb
Gross weight	705 lb	1036 lb
Bag dimensions (L x W x H)	41.7 x 41.7 x 55.9 in	28.7 x 18.1 x 7.9 in
Discharge spout	Ø: 16.5 in, Length 27.6 in	
Pallet dimensions incl bags (L x W x H)	41.3 x 41.3 x 56.3 in	44.8 x 44.8 x 61.4 in

Storage and handling

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 %.

Shelf life

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

Health, safety & environment

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

Quality assurance

Elkem's management system is certified to ISO 9001:2015.

Sustainability

For Elkem, sustainability is central to our business strategy. Our mission is to provide advanced material solutions shaping a better and more sustainable future, adding value to our stakeholders globally. We are committed to reducing in embodied carbon emission. For further information, please visit www.elkem.com/sustainability/ or contact us to learn more about our sustainability roadmap.

Additional information and contact

For further information about SIDISTAR®, a contact list can be found on our webpage www.sidistar.com