

Product data sheet

SIDISTAR® R320U

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

Description SIDISTAR® R320U is a specially designed light-coloured process modifier consisting of spherical, submicron particles of amorphous silicon dioxide. The nature of the product allows excellent dispersion of these particles in the elastomer matrix. This leads to improved dispersion of all compound ingredients and a better flow, allowing higher extrusion speeds and smoother surface of the end product. The product is supplied in an undensified form.

Applications SIDISTAR® R320U has been designed for the usage in rubber compounds. Areas of use include flame retardant cable compounds; anti-vibration parts; hoses; roofing membranes etc.

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
Cu (<i>Copper</i>)	ESM-LAB-17	ppm	≤ 100
Mn (<i>Manganese</i>)	ESM-LAB-17	ppm	≤ 300
H ₂ O (<i>Moisture, when packed</i>)	ESM-LAB-02	%	≤ 0.8
Loss on Ignition (L.O.I.) @ 950 °C	ESM-LAB-03	%	≤ 0.60
Coarse Particles > 45µ (325 mesh)	ESM-LAB-09	%	≤ 0.1
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

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

Product data sheet

SIDISTAR® R320U

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