

# SIGRAFLEX® APX2® graphite coating

## Oxidation and high-temperature resistant coating

SIGRAFLEX APX2 graphite coating is a special high-purity, high temperature and low oxidation yarn coating system based on SGL Carbon's unique and proven SIGRAFLEX APX2 technology. The coating improves lubricity and sealability and allows for the production of braided compression packings meeting the latest industry standards.

SIGRAFLEX APX2 graphite powder is made from expanded natural graphite.

The coating is provided in form of an aqueous dispersion.

### Properties

- High purity
- Low sulfur, fluorine and chlorine content
- High temperature and oxidation resistance
- Excellent chemical resistance

### Material data of SIGRAFLEX® APX2® graphite coating dispersion<sup>1)</sup>

Properties	Test methods	Units	Typical values of SIGRAFLEX APX2 graphite coating dispersion
Carbon content <sup>2)</sup>	ASTM D5373	%	≥ 98
Ash content <sup>2)</sup>	ASTM C561	%	≤ 2
Total sulfur content	ASTM D4239B (LECO)	ppm	< 300
Total chlorine content	ASTM D4327	ppm	≤ 50
Total fluorine content	ASTM D4327	ppm	≤ 10
Total halogen content	ASTM D4327	ppm	≤ 100
Weight loss in air (4 h@670°C) <sup>2)</sup>	ASTM D7582 (LECO TGA)	%/h	≤ 1
Graphite particle D50	Light scattering diffraction <sup>3)</sup>	µm	10
Graphite solid content		%	5
Total solid content		%	5
Density	Hydrometer	g/cm <sup>3</sup>	1.04

<sup>1)</sup> For preparing the final coating dispersion please refer to the instructions provided with the product.

<sup>2)</sup> Graphite only.

<sup>3)</sup> Horiba particle size analyzer.

Unless stated otherwise, all values are measured in accordance with referenced test methods, typical, non-binding and nominal. They may be subject to change and do not constitute an actual specification value. For engineering or design purposes please contact our technical sales team.

