GRAPHITE FOIL HEXAFLEX™

GFIPL
Graphite Foils India Pvt Ltd

GRAPHITE FOIL HEXAFLEX™ IS MANUFACTURED FROM NATURAL FLAKES OF GRAPHITE THROUGH A CHEMICAL AND THERMAL PROCESS WHICH LEAVES BEHIND FLEXIBLE GRAPHITE OF HIGHEST PURITY WITHOUT THE PRESENCE OF ANY BINDERS, SULPHUR AND HALOGENS.

MAIN FEATURES AND PROPERTIES

- Compliance to MESC 85/203 and EN 14772 §6.7 (Hexaflex™ Σ Sigma, θ Theta, 1θ 1Theta);
- High purity: up to 99,9% of carbon content;
- No corrosion;
- All grades are sulphur free;
- No aging effect – suitable for long-term applications;
- High tensile strength grade (5,0 MPa / 725 psi) for high-volume production.

FORMS OF SUPPLY

Thickness
0.38, 0.5, 0.76, 1.0, 1.5 mm / .015, .020, .030, .040, .060

Width
1000, 1500 mm / 40, 60" (foil); ≥4.0 / .15"(tapes)

Length of winding
30, 50, 60, 90, 100 m / 100, 165, 200, 330'

Density
1.0, 0.7, 1.12 g/cc / 62, 44, 70 lb/ft3

OPERATING RANGE

Temperature range
from -195°C / -319°F up to 450°C / 842°F
(in water steam - 650°C / 1202°F).

APPLICATIONS

- Production of spiral wound, kammprofile and corrugated gaskets, braided packings and rings for stuffing boxes;
- Power generation, chemical, oil and gas industries;
- Oxidizing and corrosive medias
(Hexaflex™ Σ Sigma, θ Theta, 1θ 1Theta)

AVAILABLE OPTIONS OF GRAPHITE FOIL HEXAFLEX™

PARAMETER	GRADE A ALPHA COMMODITY	GRADE B BETA INDUSTRIAL	GRADE Γ GAMMA HIGH-PURITY	GRADE Δ DELTA ULTRA-HIGH PURITY	GRADE Σ SIGMA ANTI-OXIDATION AND ANTI-CORROSION	GRADE Θ THETA HIGH-PURITY AND ANTI-OXIDATION	GRADE 1Θ 1THETA ULTRA-LOW LOSSES
Thickness & Density Variation, %	±10	±10	±5	±5	±5	±5	±5
Carbon, %	98,0	> 98,0	> 99,0	> 99,85	> 98,0 (99,0*)	> 99,0	> 98,0
Ash, %	2,0	< 2,0	< 1,0	< 0,15	< 2,0	< 1,0	< 2,0
Sulphur, Ppm	< 200	< 200	< 100	< 50	< 100	< 100	< 100
Chlorine**, Ppm	< 40	< 40	< 40	< 20	< 40	< 20	< 20
Fluorine**, Ppm	< 20	< 20	< 10	< 10	< 10	< 10	< 10
Total Halogens (Cl+F+Br) **, Ppm	< 200	< 200	< 100	< 50	< 200	< 100	< 100
Tensile Strength, MPa	> 4,0	> 4,5	> 4,5	> 4,0	> 5,0	> 5,0	> 5,0
Compressibility, %	> 35	> 40	> 40	> 40	> 40	> 40	> 40
Recoverability, %	> 5	> 10	> 10	> 9	> 10	> 10	> 10
Oxidation And Corrosion Inhibitor	-	-	-	-	Yes	Yes	Yes
Weight Loss (670 °C), %/H	-	< 12	< 12	-	< 4	< 3	< 1
Compliance To Special Requirements	-	DIN 3535-6	BAM; ASTM F2168 Class 2 (B), DIN 3535-6	PMUC Norms; GS RC PVE 011; BAM; ASTM F2168 Class 2 (B), DIN 3535-6	MESC 85/203; EN 14772 §6.7; ASTM F2168 Class 2 (A); DIN-28091-4, DIN 3535-6	MESC 85/203; EN 14772 §6.7; ASTM F2168 Class 2 (A); DIN-28091-4, DIN 3535-6	MESC 85/203; EN 14772 §6.7; ASTM F2168 Class 2 (A); DIN-28091-4, DIN 3535-6

subject to variation due to thickness and density
* initial carbon content (before inhibitors added)
**leachable

CONTACT US

GRAPHITE FOILS
INDIA PRIVATE LIMITED
www.gfipl.in
info@gfipl.in

OUR LOCATION

Gallops Industrial Park, D-5,
Sarkhej Bavla Road, Rajoda - Changodar.
Ahmedabad, Gujarat – 382220