

Dagangan : ARTICLE OF FIBER GLASS

Nama Perdagangan : Fiber Glass Reinforced
Plastic

Kod Tarif (Perintah Duti Kastam 2012) :

7019.90.90 00 (PDK 2017)

Tarikh Kelulusan : 04 Ogos 2017

Keterangan barangan :

Barangan merupakan plastik berwarna putih dalam keadaan bergulung yang dinamakan Fiber Glass Reinforced Plastic (FRP) didalam saiz berukuran (0.40mm~5.00mm)(D) x 25km (L).

Berdasarkan keterangan pemohon, barangan digunakan sebagai *a strength member for fiber optic cables*. Barangan dikatakan mempunyai ciri-ciri seperti berikut :

- i) Insensitive to the lightning strike, suitable for the area with frequent lightning and rain.*
- ii) Free from induction interference, can be laid and installed close to the power line and device*
- iii) FRP strength member has a high ratio of strength/ weight.*

Barangan yang dikemukakan oleh pemohon adalah seperti gambar di bawah :



Berdasarkan *Product Specification* yang dikemukakan, spesifikasi barangan adalah seperti berikut :

SPECIFICATIONS 1 (Round FRP : Ø 0.9 – Ø 5.0 mm)

Property	Values
Tensile strength (MPa)	≥ 1100
Tensile modulus (GPa)	≥ 50
Flexural strength (MPa)	≥ 1100
Flexural modulus (GPa)	≥ 50
Elongation at break (%)	≤ 4
Coefficient of linear rthermal expansion (-30-80°C)	< 8×10^{-6}
Diameter tolerance (mm)	± 2%
Minimum bending radius (mm)	40 x D
Density (g/cm ³)	2.05-2.15

SPECIFICATIONS 2

Property	G-0.4	G-0.5	G-0.6	G-0.7
FRP Diameter (mm)	0.4 ± 0.03	0.5 ± 0.03	0.6 ± 0.03	0.7 ± 0.03
Tensile strength (MPa)	≥ 1280	≥ 1280	≥ 1280	≥ 1280
Tensile modulus (GPa)	≥ 46	≥ 46	≥ 46	≥ 46
Elongation at break (%)	≤ 3.0	≤ 3.0	≤ 3.0	≤ 3.0
Minimum bending dimeter (mmØ)	≤ 16	≤ 20	≤ 24	≤ 28
High temp. bending test (80OC x 24H) (mmØ)	≤ 31	≤ 38	≤ 46	≤ 54

SPECIFICATIONS 3 (Flat FRP)

Property	Values
Width (mm)	b ± 0.1
Thickness (mm)	h ± 0.1
Minimum bending radius (mm)	≤ 60 x h
Tensile strength (MPa)	≥ 1200
Tensile modulus (GPa)	≥ 48
Elongation at break (%)	≤ 3.0
High temp. bending test (80OC x 24H) (mmØ)	< 80 x h

Ketetapan:

Ketua Pengarah Kastam Malaysia memutuskan barangan ini sesuai diperjeniskan di bawah kod tarif **7019.90.90 00 (PDK 2017)** sebagai **Glass fibres and articles thereof** berdasarkan alasan-alasan berikut :

Barangan merupakan plastik berwarna putih dalam keadaan bergulung yang dinamakan *Fiber Glass Reinforced Plastic (FRP)* didalam saiz berukuran (0.40mm~5.00mm)(D) x 25km (L).

Analisis pakar mengesahkan bahawa barangan mengandungi epoxy resin dan 83.2% bahan inorganik yang kebanyakkan fiber glass serta sebatian calcium. Barangan juga didapati mengandungi sedikit sebatian aluminium dan sebatian magnesium. Barangan dikatakan adalah sebagai *a strength member for fiber optic cables*.

Berdasarkan *General Notes* kepada *Chapter 39 EN HS 2017* di mukasurat VII-39-13 menerangkan seperti berikut :

GENERAL

Combinations of plastics and materials other than textiles

This Chapter also covers the following products, whether they have been obtained by a single operation or by a number of successive operations provided that they retain the essential character of articles of plastics :

(a) – (c).....

(d) *Products consisting of glass fibres or sheets of paper, impregnated with plastics and compressed together, provided they have a hard, rigid character. (If having more the character of paper or of articles of glass fibres they are classified in Chapter 48 or 70, as the case may be.)*

The provisions of the preceding paragraph also apply, mutatis mutandis, to monofilaments, rods, sticks, profile shapes, tubes, pipes and hoses and articles.

Dalam menentukan *essential character* barangan, ia adalah terkeluar dari heading 70.19 sekiranya ia berkeadaan keras, berdasarkan kepada Nota keterangan EN (6)(a) kepada heading 70.19 mukasurat XIII-7019-3 seperti berikut :

*The heading **excludes** :*

(a) *Semi-finished products and articles obtained by compressing glass fibres, or superimposed layers of glass fibres, impregnated with plastics, if having a hard, rigid character and hence having lost the character of articles of glass fibres (Chapter 39).*

Berdasarkan kepada keterangan barangan dan pengesahan pakar dimana komposisi bahan inorganik yang kebanyakkan fiber glass serta sebatian calcium adalah 83.2%. Barangan sesuai diperjeniskan dibawah heading 70.19 berdasarkan liputan didalam EN HS 2017 Chapter 70 mukasurat XIII-7019-1 seperti berikut :

70.19 - *Glass fibres (including glass wool) and articles thereof (for example, yarn, woven fabrics) (+).*

- Slivers, rovings, yarn and chopped strands :

7019.11 - - *Chopped strands, of a length of not more than 50mm*

7019.12 - - *Rovings*

7019.19 - - *Other*

- Thin sheets (voiles), webs, mats, mattresses, boards and similar nonwoven products :

7019.31 - - *Mats*

7019.32 - - *Thin sheets (voiles)*

7019.39 - - *Other*

7019.40 - Woven fabrics of rovings

- Other woven fabrics :

7019.51 - - Of a width not exceeding 30 cm

7019.52 - - Of a width exceeding 30 cm, plain weave, weighing less than 250 g/m², of filaments measuring per single yarn not more than 136 tex

7019.59 - - Other

7019.90 – Other

Berdasarkan struktur tarif dalam Perintah Duti Kastam 2017, barangan sesuai diklasifikasikan di bawah kod tariff **7019.90 90 00** sebagaimana berikut :

70.19		Glass fibres (including glass wool) and articles thereof (for example, yarn, woven fabrics).
		- Slivers, rovings, yarn and chopped strands:
	7019.11.00 00	- - Chopped strands, of a length of not more than 50 mm
	7019.12.00 00	- - Rovings
	7019.19	- - Other:
	7019.19.10 00	- - - Yarn
	7019.19.90 00	- - - Other
		- Thin sheets (voiles), webs, mats, mattresses, boards and similar nonwoven products:
	7019.31.00 00	- - Mats
	7019.32.00 00	- - Thin sheets (voiles)
	7019.39	- - Other:
	7019.39.10 00	- - - Asphalt or coal-tar impregnated glass-fibre outerwrap of a kind used for pipelines
	7019.39.90 00	- - - Other
	7019.40.00 00	- Woven fabrics of rovings
		- Other woven fabrics:
	7019.51.00 00	- - Of a width not exceeding 30 cm
	7019.52.00 00	- - Of a width exceeding 30 cm, plain weave, weighing less than 250g/m ² , of filaments measuring per single yarn not more than 136 tex
	7019.59.00 00	- - Other
	7019.90	- Other:
	7019.90.10 00	- - Glass fibres (including glass wool)
	7019.90.20 00	- - Blinds
	7019.90.90 00	- - Other