

Grey 6.7mm Phthalate Free PU ESD Gas Hose (Carbon Dioxide)

Product Code: I08606PF

The Grey 6.7mm Phthalate Free PU ESD Medical Gas Hose (Carbon Dioxide) is designed to fulfill all the current and future requirements for medical gas hoses. All the materials used are USP VI compliant.

The raw material used is composed of ingredients, which meet the current requirements of the FDA for food contact applications when used in accordance with the requirements and limitations of 21 CFR: 175.105; 177:1680 for repeat use applications only; 177:2600.

Features

- Does not contain plasticizer and does not work harden
- Will not expose patients to any potentially harmful phthalate vapours
- Designed to be used in areas that require static dissipation
- All the mating surfaces are made from ESD material with a surface resistivity of $1.1 \times 10^{11} \Omega/Sq$, when tested to ASTM D 257
- Sufficient to prevent any risk promoting static build up

Specifications

Colour	Grey	
Gas Type	Carbon Dioxide	
Coil Length (m)	30	
Internal Diameter - Bore Size (mm)	6.7	
Overall Diameter - Cover (mm)	12.7	
Stripe Width (mm)	2.8	
Material	Liner	USP VI ESD TPU
	Cover	
	Gas Barrier Layer	USP VI TPU
Liner and Cover Resistivity	1.1×10^{11} (ASTM D-257)	
Burst Pressure	10,000 kPa (100 Bar) at 23°C	
Internal Dimensions (mm)	Conforms to EN ISO 1307	
Layer Adhesion	5.5kN/m (min.) - EN ISO 1307	
Deformation Under Pressure	1.9% (diameter) at 1400kPa	
	1% (length) at 1400kPa	
Occlusion Resistance	No flow reduction (BS EN ISO 5359:2014, Clause 5.7)	
Contaminant Test	No indication (Gastec Polytec 107 tubes)	
Minimum Life Cycle	5 years at 23°C and ambient humidity	



Permeability

The above graphs contain data based upon tests performed on films up to 200 Microns with the higher projections based upon the known relationships between thickness and permeability. These figures would indicate that based upon the actual wall thickness, the permeability of should be close to $0\text{cm}^3/\text{m}^2 \cdot \text{h} \cdot \text{bar}$ for all gases.

Water Vapour Permeability

Method: A 5 metre long test hose of proven gas tightness is placed in a climate controlled environment at 40°C and $90\% \text{RH} \pm 5\%$. The hose is pressurised to 4 bar gauge pressure with dry oil-free nitrogen or medical oxygen **from the same source simultaneously. The gas supply is then disconnected and the hoses left for 48 hours.**

A Dräger colorimetric test tube ref. 8101321 (or tube similar specification) is then used to determine the water concentration of gas retained in the hose.

Result: Water content in retained gas = 1.4 - 1.6mg/l

Toxicological Information Liner and Cover Material

The material has the following approvals and certificates of compliance for all these.

FDA 175.105 for food contact applications and EU food contact approval.

USPVI compliance having passed the Acute System Toxicity, Intracutaneous Toxicity and Implantation Tests.

Toxicological Information and Gas Barrier

The material has the following approvals and certificates for all these.

FDA 175.05, FDA 177.1680, FDA 177.1210 & FDA 177.2600 for food contact applications.

EU food contact approval.

USPVI compliance having passed the Acute System Toxicity, Intracutaneous Toxicity and Implantation Tests.

Plasticisers & Bonding Agents (Cyclohexanone)

No bonding or plasticisers are used in the manufacture of these materials or hoses; therefore, there will be no post production leaching out of any such chemicals.

Manufacturing Environment & Storage

Surface contamination will not exceed the requirements stated in BS EN ISO 15001:2004, the product will be fully cling wrapped with the ends left open.

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