



SPECIALIST OEM SUPPLIER OF HOSES TO THE BUS AND TRUCK INDUSTRY



SILCELL



FKM



OAT COOLANT



SPECIALIST OEM SUPPLIER OF HOSES TO THE BUS AND TRUCK INDUSTRY

Leyland Hose & Silicone, Centurion Court
Centurion Way, Leyland UK PR25 3UQ T: +44 (0)1772 642478
www.lhss.co.uk

OEM SUPPLIER

V4

www.lhss.co.uk

OEM SUPPLIER



Designed for use in applications where high purity of the fluid being transported, is important. Silcell is also suitable for use in potable water, food and pharmaceutical applications.

A platinum cured silicone, lined hose. Silcell is specifically designed for use in Fuelcell applications. It's high purity, low extractable properties, also make it suitable for food and water contact applications. The liner material contains no pigment or other additives typically found in standard silicone compounds. This significantly reduces or eliminates the risk of contamination from siloxanes, oils and catalyst bi-products, which can be an issue with standard silicone hoses.

Not recommended for use with OAT coolants or,containing 2-EHA (2-Ethylhexanoic Acid) for example, Dexcool.

Technical details

3, 4 or 5 ply construction depending on inner diameter.
 2.0mm minimum liner – hose can be any colour in the outer plies and cover.
 Polyester fabric reinforcement.
 Temperature range: -55°C up to +180°C
 Working pressure: 4 bar minimum. *Varies according to diameter, higher pressure is possible with smaller diameters.
 Finished hoses cannot be used for implants.

Inner liner conforms to:

- US FDA-CFR 21 Part 177.2600
- German BGVV XVA LIIA
- German KTZ regulation part 1.3.13



Leyland hose & Silicone Fluorocarbon lined hose (FKM) is a high performance hose suitable for a wide variety of applications. Our FKM lined hose, is manufactured using the highest quality Fluorocarbon available. Areas of use include:

- High temperature use up to 230°C
- Resistance to a wide range of chemicals
- Grade selected for its outstanding resistance to Hydrogen, Oxygen and air permeation
- Excellent low temperature properties with good sealing at -25°C and with a Tg of as low as -40°C
- Specifically selected and tested for use with Fuel cell systems
- Retains good inter layer bond strength in dynamic applications
- EGR systems
- Resistance to OAT coolants
- Prevents siloxanes and peroxide bi-products being extracted from silicone

Fluorocarbon specification:

Hardness: 70 Shore A
 Tensile: 10 (MPa)
 Elongation (Min)%: 175
 Change in hardness: +/- 15 Shore A (70 hrs at 250°C)
 Compression set (%): 35 (Maximum) (22hrs @ 175°C)

Silicone outer layers:

A variety of specifications can be used depending on service application.

Hardness range: 50 – 75 Shore A
 Temperature range: -55 to +230°C
 Fabric reinforcement: Polyester, Meta-aramid or fibreglass
 Colour: Any



LHSS – OAT Grade silicone hose offers an option between EPDM, Blue Silicone Coolant Hose and Fluoro-silicone Hose, both from cost and performance aspect.

The construction of the OAT hose eliminates some of the potential failure points of a fluoro-lined and 'standard' blue silicone hose while out-performing EPDM hose.

Leyland Hose & Silicone manufacture a high-grade OAT resistant hose which also withstands much higher temperatures than conventional coolant hoses.

Our OAT grade hose will operate in the range 50°C up to +200°C, making our OAT hose suitable for use in higher, under bonnet temperatures. Our OAT grade silicone hose, offers typically 20 – 30% higher burst pressure than standard coolant hoses.

Benefits of LHSS OAT Acid Coolant Hose

- Suitable for use with all coolant types
- Includes use with SI-OAT
- Excellent performance and reliability, in fuel cell coolant systems
- Available in a range of colours
- Eliminates some of the potential failure points of fluorolined silicone while outperforming EPDM
- 30% higher burst pressure than standard silicone hose
- Hoses perform over a much wider temperature range (-50°C to +230°C)

Please refer to our separate OAT coolant brochure, for further information.