

HIGRADE 101 FIRETEC

COMPOTEC®

COMPOTEC® HIGRADE 101 hose it's a FIRESAFE High purity Fuel hose. Multi-layer thermoplastic hose manufactured from Polypropylene, Polyester and Polyethylene films and Polypropylene fabrics, with a weather-proof and abrasion resistant outer cover made of Polyvinyl coated Polyester fabric. Outer cover is also available in **ELASTOTHANE®**, a special PU coated fabric; its UV, Ozone, Sunlight and weathering resistance, offers superior temperature and abrasion characteristics.

All the different layers are wrapped together and tensioned between internal and external wire spirals. This enables our product to meet the requirement of the Petrol-chemical industry and those of the oil tank truck industry. **COMPOTEC® HIGRADE 101** is manufactured according to the requirement specified by the European Standards EN 13765:2015 Type 3 (BS 5842:1980), and in accordance with Australian Standards AS 2683. Complies the recommendations of NAHAD Guidelines (NAHAD 600/2005).

Specifically designed for the transfer of special Aviation fuels, Jet Fuel (JET A-1 and JP-6), Jet biofuels, Synthetic jet fuel (SPK) or Aviation Turbine fuel (ATF).

Manufactured with special procedures, designed to eliminate any contaminants, COMPOTEC® HIGRADE 101 hoses fully complies BS 3492:1987 for carrying gasoline, kerosene, fuel and lubrication oils, including aviation fuels with high aromatic content at a temperature up to 100°C. Bore material (first layer in contact with fluid) is made in an high purity, Ultra High Molecular Weight Polyethylene (UHMW PLT) to avoid any possible absorption or contamination. Stainless steel inner wire is included to ensure that no metallic flakes are deposited into the conveyed products. During all the phases of production, the hose is controlled and no lubricants or oils are used in the manufacturing process. Extremely flexible, easy to handle and bend, **COMPOTEC® HIGRADE 101** hoses are used in such applications as transfer, loading and discharging, storage tank and in-plant use, all hoses are 100% aromatic resistant and perfectly antistatic and can be used for delivery or suction of vapours. **COMPOTEC® HIGRADE 101** assemblies are fitted with an extensive range of couplings readily available, externally swaged with Stainless Steel or Aluminium ferrules.

Jet fuel or **aviation turbine fuel (ATF)** is a type of aviation fuel designed for use in aircraft powered by gas turbine engines. It is colourless to straw-colored in appearance. The most commonly used fuels for commercial aviation are **Jet A** and **Jet A-1**, which are produced to a standardized international specification. The only other jet fuel commonly used in civilian turbine-engine powered aviation is **Jet B**, which is used for its enhanced cold-weather performance.

Commonly used for High performance fuels 109 octane for F1 racing cars, and for alcohol-based fuels used in American open-wheel racing (Firetec version).

COMPOTEC® HIGRADE 101 assemblies are tested at 1 ½ times rated working pressures for safety and reliability, in accordance with EN ISO 1402. The securing ferrule, at one end of the hose, is permanently marked by embossing, with manufacturer's name, nominal bore, serial number and the test date. Full test certification including Electrical continuity test, can be supplied on request.

Burst pressure indicated, is at ambient temperature when tested in accordance with EN ISO 1402 (BS 5173 section 102.10:1990).

Electrical continuity is achieved by the two wires bonded to the end fittings, this helps dissipate accumulated charge and to avoid static flash. Upon request it's possible to manufacture **HIGRADE 101** hoses in accordance to the Directive 94/9/EC **"ATEX"**, with a special outer antistatic black cover and cable for ground connection.

Assemblies are suitable for use with a vacuum not exceeding 0.9 Bar. According to the Standard description, **COMPOTEC® HIGRADE 101** hose meets the requirements for type AX & BX, for all products included in "Class 1". **COMPOTEC® HIGRADE 101** hoses are supplied in the **FIRETEC** version to meet the Fire retardand performance criteria acc. to European Standards EN 13765:2015 Normative, Annex G, and ADR self-extinguish CL1 characteristics.

FIRETEC hose utilize a series of fire retardant barriers and an outer cover made of special ADR self extinguish CL 1 coated fabric. **COMPOTEC® HIGRADE 101** hose can be supplied, on request, in the HIPRESS version, with extra **ARAMEX** fabric reinforcements, to withstand higher pressures, WP 20, 25 up to 40 Bar, for special applications. All **COMPOTEC®** meets the EN, CE, AS, U.S. Coast Guard requirements, NAHAD Guidelines, are Lloyd's and DNV approved



HEAVY DUTY AVIATION FUEL HOSE EN 13765:2015 - TYPE 3

| Size | | Working Pressure Bar | | Bend Radius EN ISO 1746 | Weight | Maximum length |
|-------|--------|----------------------|--------|-------------------------|--------|----------------|
| mm | inch | SF 4:1 | SF 5:1 | mm | Kg/mt | Mt |
| 20 | 3/4" | 20 | 16 | 75 | 0,78 | 40 |
| 25 | 1" | 20 | 16 | 100 | 0,94 | 40 |
| 32 | 1 1/4" | 20 | 16 | 125 | 1,27 | 40 |
| 40 | 1 1/2" | 20 | 16 | 140 | 1,49 | 40 |
| 50 | 2" | 20 | 16 | 180 | 2,18 | 40 |
| 65 | 2 1/2" | 20 | 16 | 220 | 3,09 | 40 |
| 75/80 | 3" | 20 | 16 | 180 | 3,66 | 40 |
| 100 | 4" | 20 | 16 | 400 | 5,28 | 40 |
| 125 | 5" | 20 | 16 | 485 | 8,20 | 40 |
| 150 | 6" | 20 | 16 | 575 | 11,90 | 40 |
| 200 | 8" | 20 | 16 | 800 | 16,20 | 40 |
| 250 | 10" | 20 | 16 | 1000 | 22,78 | 25 |
| 300 | 12" | 20 | 16 | 1200 | 31,78 | 25 |

HIGRADE 101 HD

| Code | HYGRADE 101 HD ZZ | HYGRADE 101 HD ZX | HYGRADE 101 HD XZ | HYGRADE 101 HD XX |
|--------------|----------------------------|-------------------|-------------------|-------------------|
| Applications | AVIATION FUEL /OIL LIQUIDS | | | |
| Colour | NATO Green / Black | | | |
| Temperature | -40 +100°C | | | |
| Inner wire | Galv.Steel | Galv.Steel | St.Steel | St.Steel |
| Outer wire | Galv.Steel | St.Steel | Galv.Steel | St.Steel |

STANDARD DUTY AVIATION FUEL HOSE EN 13765:2015 - TYPE 2

| Size | | Working Pressure Bar | | Bend Radius EN ISO 1746 | Weight | Maximum Length |
|-------|--------|----------------------|--------|-------------------------|--------|----------------|
| mm | inch | SF 4:1 | SF 5:1 | mm | Kg/mt | Mt |
| 40 | 1 1/2" | 14 | 10 | 100 | 1,23 | 40 |
| 50 | 2" | 14 | 10 | 150 | 1,66 | 40 |
| 65 | 2 1/2" | 14 | 10 | 200 | 2,10 | 40 |
| 75/80 | 3" | 14 | 10 | 250 | 2,53 | 40 |
| 100 | 4" | 14 | 10 | 300 | 4,10 | 40 |
| 125 | 5" | 14 | 10 | 400 | 7,10 | 40 |
| 150 | 6" | 14 | 10 | 500 | 9,85 | 40 |
| 200 | 8" | 14 | 10 | 740 | 13,31 | 40 |

HIGRADE SD

| Code | HYGRADE SD ZZ | HYGRADE SD ZX | HYGRADE SD XZ | HYGRADE SD XX |
|--------------|----------------------------|---------------|---------------|---------------|
| Applications | AVIATION FUEL /OIL LIQUIDS | | | |
| Colour | NATO Green / Black | | | |
| Temperature | -40 +100°C | | | |
| Inner wire | Galv.Steel | Galv.Steel | St.Steel | St.Steel |
| Outer wire | Galv.Steel | St.Steel | Galv.Steel | St.Steel |

