

# Biofuels Hose

The transfer of Biofuels is increasingly important in the petrochemical industry. Bioethanol presents few problems since most rubber and thermoplastics have generally good chemical resistance. However, Biodiesel contains esterified vegetable oils which have been found to damage most elastomers typically used in the production of fuel oil hoses. Composite hose, on the other hand, can be lined with polyamide (Nylon), which has excellent resistance to both mineral oils and the component chemicals which constitute typical Biofuels.

Dantec Ltd have received much interest concerning the transfer of Biofuels, from bulk fuel storage and transport companies throughout the world.

The hose we offer for these media is Danoil 9, with aluminium inner wire and galvanised outer wire (Danoil 9AG) or with Nylon coated inner wire and galvanised outer wire (Danoil 9NG), or with stainless steel, inner wire and galvanised outer wire (Danoil 9SG). All hoses are available with stainless steel outer wire too. Hoses are available from 1" to 10" nominal bore, and maximum



working pressure to 14 bar. The Nylon lining gives excellent resistance to Biodiesel and also alcohols.

Composite hose is particularly suitable for these applications because of its excellent chemical resistance and lightweight flexibility.

As well as nitrile: polypropylene, polyvinyl, and tygon materials are also vulnerable to problems when conveying Biodiesel. Brass, bronze, copper, lead, tin, and zinc may also accelerate the oxidation of diesel and Biodiesel fuels, and create fuel insolubles (sediments) or gels and salts when reacted with some fuel components. All lead solders, zinc linings, copper pipes, brass regulators, and copper fittings of any type should be avoided. Recommended equipment should be of stainless steel, carbon steel, or aluminium.

## Danoil 9 AG

Bore Diameter		Max. Working Pressure		Bend Radius		Weight	
INS	MM	BARS	PSI	INS	MM	KG/M	LB/FT
2.5	65	10.5	150	7.0	180	1.6	1.1
3	75	10.5	150	8.0	205	1.7	1.2
4	100	10.5	150	10.5	265	2.4	1.6

## Danoil 9 NG or SG

Bore Diameter		Max. Working Pressure		Bend Radius		Weight	
INS	MM	BARS	PSI	INS	MM	KG/M	LB/FT
1	25	14	200	4.0	100	0.8	0.5
1.5	38	14	200	5.5	140	1.2	0.8
2	50	14	200	7.0	180	1.9	1.3
2.5	65	14	200	8.0	205	2.5	1.7
3	75	14	200	11	280	3.0	2.0
4	100	14	200	15.5	395	5.2	3.5
Heavy Duty							
4	100	14	200	16.0	405	6.4	4.3
6	150	14	200	20.0	510	10.7	7.2
8	200	14	200	30.0	760	15	10.0
10	250	10.5	150	36.0	915	20.5	13.7