

For bottom loading of road tankers at terminals with diesel, heating oil and gasoline it is common to use DN 100 mm hose assemblies which are permanently filled (wet hose service). For decades Elaflex 'Yellow Band' TW hoses have set the standard for this application.

There are standard requirements for heating oil, diesel (EN 590) and gasoline (EN 228) fuel qualities, but the definitions of mixtures involve a high degree of freedom for the producer.

The efforts of the oil industry to manufacture environmentally friendly and efficient premium products have led to constantly new and changing fuel qualities. Hose assemblies used at the terminal are therefore subjected to volatile strain due to changing amounts as well as new types of aromatics and additives. This particularly applies to gasoline fuels. Some of the new compositions may have an adverse effect on the longevity of standard hoses.

For heating oil and diesel fuels we remain with our general recommendation for 'Yellow Band' TW hoses. However, due to the fore mentioned high fluctuations of aromatic and additive components in gasoline fuels we now offer the type **POLYPAL OIL** as an alternative. The universally resistant, electrically conductive UPE lining is suitable for all types of petroleum based products, aromatics and fuel additives. The hose construction provides a very low permeation of highly volatile fuel components. The cover is made of 'oil resistant' chloroprene.

POLYPAL OIL follows a trend that has already become accepted practice in the chemical industry where universal hoses prevail against hoses with specialised rubber linings. The new type qualifies as an all-round hose for the petroleum industry, suitable for the most critical applications.



Loading station at the terminal ('gantry'): Fuel bottom loading of a road tanker



Following several years of practical field testing we recommend POLYPAL OIL as a standard tanker loading hose for gasoline products, optionally also as a 'one-for-all' universal hose for all kinds of media in this application. To assist operators in selecting the best for them please refer to the below guide:

Media	Recommended Hose Type
Diesel fuels to EN standard, heating oils – also with high biogenous content up to B 100	TW / alternatively POLYPAL OIL
Gasoline fuels to EN standard, Petroleum based products with aromatic content < 50%	POLYPAL OIL / alternatively TW if fuel qualities do not fluctuate considerably and if good experiences have already been made
Gasoline fuels with aromatic content > 50%	POLYPAL OIL

Technical Data

POLYPAL OIL universal hose with helix for refineries, petrochemical operations and terminals. Suitable for all petroleum based products and solvents as well as almost all chemicals.

Working pressure 16 bar, temperature range -30° C up to +100° C. Corresponds to EN 12115.



Conductivity: Ω /T-type to EN 12115. Electrical resistance < 10⁶ OHM between hose end fittings, < 10⁹ OHM from lining to cover through the hose wall. Suitable for use in EX-zones 0, 1 and 2.

Lining: UPE black, smooth, electrically conductive

Reinforcement: Textile braids with galvanised steel helix

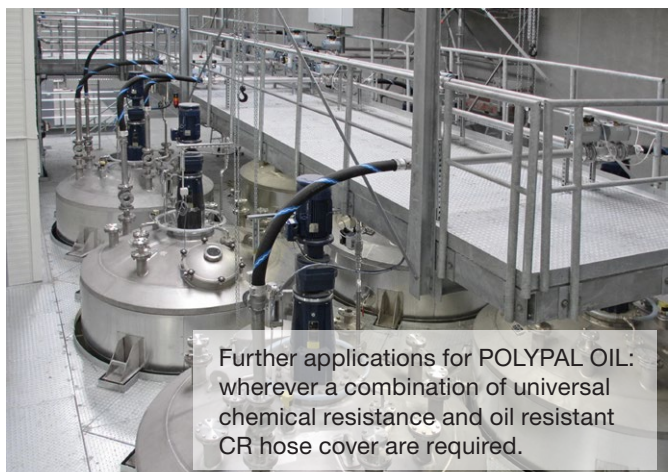
Cover: Chloroprene (CR), black, electrically conductive

Marking with a blue-white-blue spiral and abrasion resistant, continuous embossing – example:

ELAFLEX POLYPAL OIL 100 · EN 12115 · UPE · SD · Ω /T · UNIVERSAL · 16 BAR ·  ·  · MADE IN GERMANY · 3Q-18

Sizes: DN 50 · 75 · 100 – available ex stock.

For further details see [Catalogue page PAL 01](#)



Further applications for POLYPAL OIL: wherever a combination of universal chemical resistance and oil resistant CR hose cover are required.