

Product	Sinopec HFC Water-glycol Fire-resistant Hydraulic Fluid 4631
Summary	<p>Product description</p> <p>Sinopec HFC Water-glycol Fire-resistant Hydraulic Fluid 4631 is formulated with polyolester base stocks, and selected additives. It is specially formulated with a blend of water, ethylene or diethylene glycol, selected additives and high-viscosity polyglycol thickeners to meet the ISO 6743/4 HFC classification for fire-resistant hydraulic oils of the water-glycol type. It is designed for use in high-pressure hydraulic systems where the requirements for fire resistance, pump wear protection and viscosity are met by water-glycol fluids.</p>

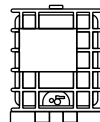
Available sizes



PAIL – 18L



DRUM – 200L



IBC – 1000L



Also
available
in bulk

Applications

Sinopec HFC Water-glycol Fire-resistant Hydraulic Fluid 4631 is suitable for use in:

- Hydraulic equipment (vane, gear or piston-type pumps) where an ISO 6743/4 HFC type fire-resistant hydraulic fluid is required.
- Hydraulic systems operating in areas where there is a high risk of fire (e.g. steel mills, coal mines, the chemical industry), at operating temperatures between -30°C and 60°C and at continuous operating pressures of up to 20 MPa.
- Coke furnace door openers.
- Basic oxygen furnace hydraulics, electric welders, moulding and metal die-casting machinery, welding machines, furnace charging equipment, continuous metal casting equipment, glass drawing machinery.
- Mobile equipment operating in areas of high fire risk.

Caution: Sinopec HFC 4631 Water-glycol Fire-resistant Hydraulic Fluid is *not* compatible with conventional mineral-oil based hydraulic fluids or ISO 6743/4 HFDU-type fire-resistant hydraulic fluids.

Note also that water-glycol fluids are *not* compatible with all seal materials or paints, and that care must be taken to ensure the hydraulic system is designed or adapted for use with such fluids. Compatible seal materials include: nitrile, PTFE, Neoprene® (chloroprene), silicone, Viton®, nylon, natural rubber and butyl rubber. Compatible paints include vinyl and epoxy resin-based products.

Features and benefits

- Excellent thermal oxidation stability, prevent the deterioration of lubricating oil at high temperature.
- Outstanding fire-resistant properties, providing safer working conditions for people and plant.
- Excellent rust and corrosion prevention properties, in both the liquid and the vapour phase, protect the hydraulic system from rust and corrosion and avoid rust debris contamination that can damage components.
- Excellent lubricity and antiwear properties, protect components against wear, extend pump and valve life, and reduce maintenance costs.
- Very low pour point (<-50°C) ensures good cold-start performance.
- Very high viscosity index provides excellent viscosity-temperature performance, and provides optimum protection over a wide operating temperature range.
- Excellent stability during storage reduces inventory costs.
- Long fluid service life (up to 10,000 hours) can be achieved when equipment is properly maintained.
- Low toxicity and is readily biodegradable, safer for the environment and the operator.

Product Data Sheet

Typical data

Sinopec HFC Water-glycol Fire-resistant Hydraulic Fluid 4631		
Viscosity grade	40	50
Appearance, visual	clear, red fluid	clear, red fluid
Kinematic viscosity, ASTM D 445		
cSt @ -18°C	923	910
cSt @ 40°C	40.25	50.10
Viscosity index, ASTM D 2270	185	220
Air release @ 50°C, mins, ASTM D 3427	11	14
Foaming characteristics, @ 24°C, sequence 1, ASTM D 892	30/0	20/0
pH value, ASTM D 664	9.0	10.0
Rust prevention, ASTM D 665		
distilled water	no rust	no rust
Copper corrosion, 3 hours @ 50°C, ASTM D 130	1a	1a
Pour point, °C, ASTM D 97	<-50	<-50
Density @ 20°C, kg/l, ASTM D 4052	1.078	1.080

These data are given as an indication of typical values and not as exact specifications.

Industry and OEM specifications

Sinopec HFC Water-glycol Fire-resistant Hydraulic Fluid 4631 meets the performance requirements of the following industry specifications:	
ISO	12922 HFC
GB/T ¹	21449

¹Note: 'GB' standards are the National Standards of the People's Republic of China.

Accuracy of information

Data provided in this PDS is typical and subject to change as a result of continuing product research and development. The information given was correct at the time of printing. The typical values given are subject to variations in the testing procedures and the manufacturing process may also result in slight variations. Sinopec guarantees that its lubricants meet any industry and OEM specifications referred to on this data sheet.

Sinopec cannot be held responsible for any deterioration in the product due to incorrect storage or handling. Information on best practice is available from your local distributor.

Product and environmental safety

This product should not cause any health problems when used in the applications suggested and when the guidance provided in the Material Safety Data Sheet (MSDS) is followed. Please consult the MSDS for more detailed advice on handling; MSDSs are available from your local distributor. Do not use the product in applications other than those suggested.

As with all products, please take care to avoid environmental contamination when disposing of this product. Used oil should be sent for reclamation/recycling or, if not possible, must be disposed of according to relevant government/authority regulations.

The SINOPEC trademark is registered and protected.

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