



# Glytex<sup>®</sup> HFC 46

## High performance fire resistant hydraulic fluid

### Product description

Glytex HFC 46 is a high performance fire resistant hydraulic fluid with a water-glycol formulation, designed to meet 7th Luxembourg Report standards.

### Customer benefits

- Formulated with high level water content, designed to offer flame resistance, greater safety and reliability
- High level water content helps maintain effectiveness where evaporation is an issue or leakage occurs in high temperature operations
- Offers good anti-corrosion properties towards metals commonly used in circuits as well as iron, copper, aluminium and many alloys
- Helps protect against lacquer and muddy deposit formation, promoting trouble-free distributor, filter and servo valve operation
- Promotes reliable filterability and deaeration in highly sophisticated equipment with fine filtration down to three micrometers

### Product highlights

- **High water content offers flame resistance, greater safety and reliability**
- **Designed for effectiveness under evaporation or high pressure leakage**
- **Offers good anti-corrosion properties**
- **Helps protect against lacquer and muddy deposits**
- **Promotes fine filtration down to three micrometers**

#### Selected specification standards include:

7th Luxembourg Report	ISO 12922
SMS group: SN180-2	VDMA 24317

## Applications

Glytex HFC 46 is recommended for many hydraulic systems operating in close proximity to hot surfaces or flames and where a fire hazard exists in the event of leaks of pressurised hydraulic fluid.

### Mines

- tilting devices
- elevator chariots

### Steel Industry

- hydraulic systems in continuous casting
- hydraulic systems in gates and tilting ovens
- casting under pressure

### Forging

- hydraulic systems in oven doors
- hydraulic systems in tilting devices
- forging presses

Glytex HFC 46 also has several applications in marine hydraulic systems as well as welding robots.

## Approvals, performance and recommendations

### Approvals

- Glytex HFC 46 is approved according to 7th Luxembourg Report: Requirements and tests of fire resistant hydraulic fluids for hydraulic load transmission and control in mining
- SMS group: SN180-2

### Performance

- VDMA 24317
- ISO 12922

### Recommendations

Service Temperature:

-20°C up to +65°C

Recommended Service Temperature:

+30°C up to +50°C

## Product maintenance and handling

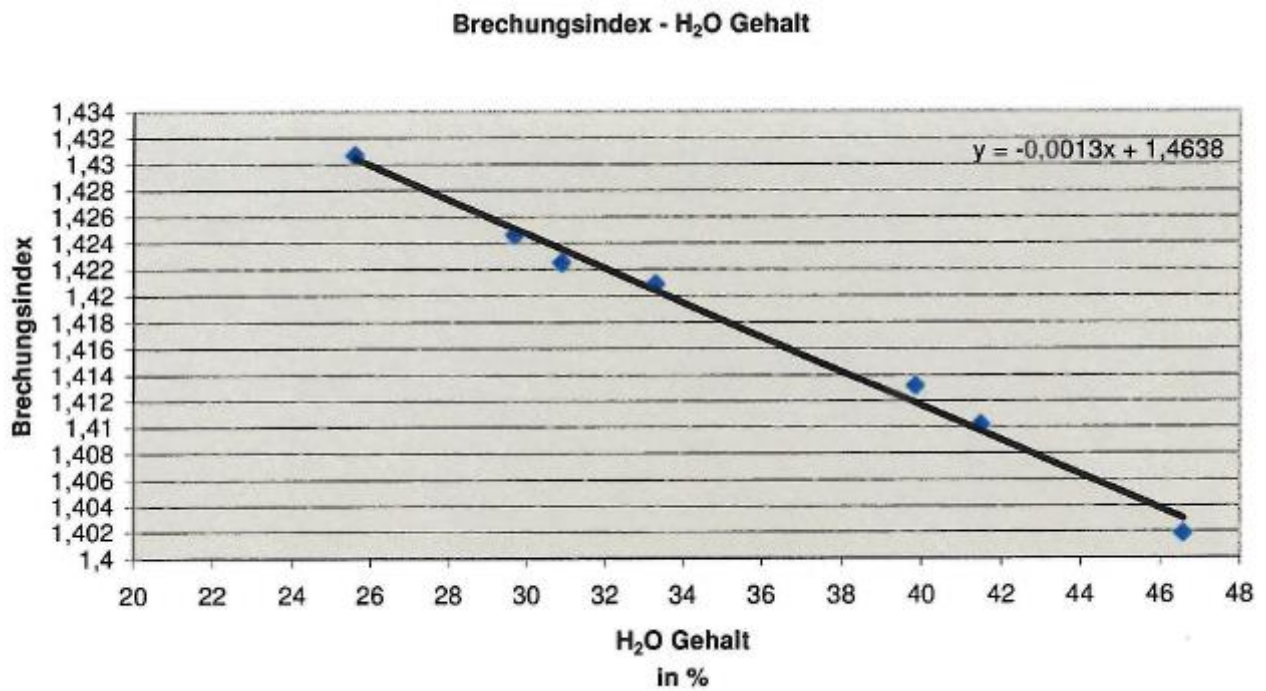
In general, conventional machine lacquers can be dissolved from glycol-mixtures. We recommend 2K-epoxide-resin-lacquers.

Typical test data		
Test	Test Methods	Results
<b>Viscosity Grade</b>		<b>46</b>
Appearance	Visual	Turbid Red
Kinematic Viscosity at -20°C, mm <sup>2</sup> /s	DIN 51 562	1411
Kinematic Viscosity at 0°C, mm <sup>2</sup> /s	DIN 51 562	293
Kinematic Viscosity at 20°C, mm <sup>2</sup> /s	DIN 51 562	108
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s	DIN 51 562	49
Viscosity Index	DIN ISO 2909	207
Density at 15°C, kg/l	DIN 51 757	1.0977
Density at 20°C, kg/l	DIN 51 757	1.0948
Foam Seq I at 25°C, ml	DIN 51 566	160/0
Foam Seq II at 50°C, ml	DIN 51 566	40/0
Foam Seq III at 25°C, ml	DIN 51 566	140/0
Air Release, min	ASTM D3427	14.5
Membrane Filtration, 0,8 µm		15
Afnor Filtration test (glass fibre filter N° 8 – Schleicher & Schuell, pore size: 0.75-149µm, refr. Nr: 370 119, 0.5 bar, 20°C)	NFE 48 692	1.08
Afnor Filtration		
Filtration Index		1.13
Cetop Stage I,%v		92.54
Cetop Stage II, %v		84.90
Four Ball wear, Scar diameter, mm	ASTM D4172	0.60
Vickers pump test total loss, mg	DIN 51 389	≤ 50
Flow Temperature, °C	DIN 51 568	≤ -40
Water content, ppm(%)	Karl Fisher	456412(45.6%)
Ash content, %	ASTM D1119	0.024
pH at 25°C	ASTM D1287	9.5

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

#### A Chevron company product

Determination of water content with refractometer



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