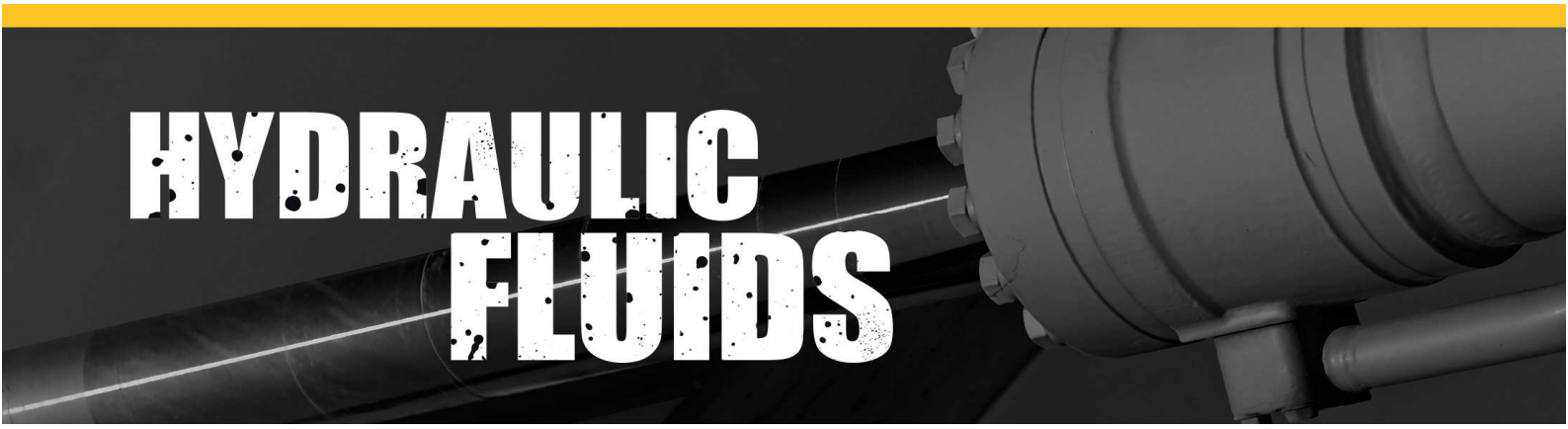


QUINTOLUBRIC® 815

FIRE RESISTANT HFA-E HYDRAULIC FLUID

APPLICATION SHEET

BENEFITS

- » Outstanding hard water emulsion stability
- » Excellent corrosion protection
- » Low applied costs
- » Low aquatic toxicity (WEC 1)

APPLICATIONS

QUINTOLUBRIC 815 has been designed to operate in water hydraulic equipment and fulfils the requirements set for fire resistant hydraulic fluids of the type HFA-E (oil-in-water Emulsions). Unlike traditional HFA-E, QUINTOLUBRIC 815 contains a low amount of mineral oil and forms a micro-emulsion upon mixing with water. In comparison to high mineral oil containing HFA-E products QUINTOLUBRIC 815 delivers improved mixing-, stability-, and bacteria/fungi resistance properties. QUINTOLUBRIC 815 can be applied in ecologically sensitive areas since the product has a low Water Endangering Class (WEC 1).

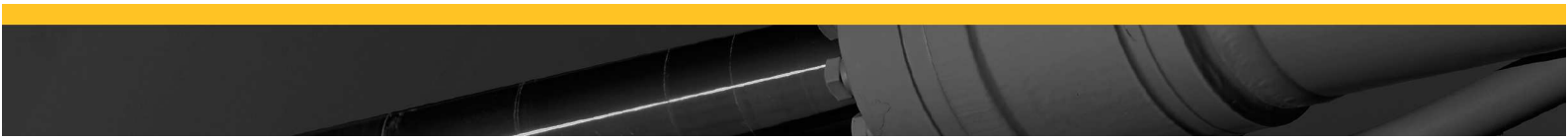
USAGE

QUINTOLUBRIC 815 is delivered as a concentrate forming a micro-emulsion when mixed with water. QUINTOLUBRIC 815 can be applied in a range of water types varying from very soft to hard, whereby the recommended water hardness range is 10-30° dH. The concentration-in-use will depend on the application and on the properties of the process (make-up) water. Because of the large number of water types available, specific recommendations on the usage of QUINTOLUBRIC 815 should be solicited from QUAKER. The standard concentration range for QUINTOLUBRIC 815 is 1.5 – 3.0 %.

PROPERTIES

PROPERTIES (TEST METH(	TYPICAL VALUE
Appearance	Yellow to amber fluid
pH (ASTM D70)	9.6
Density (ASTM D1298) 15°C	1.01 g/cm^3
Pour Point (ASTM D97)	-4°C

TYPICAL PERFORMANCE (2% Solution V water)	
Appearance	Fluorescent Liquid
Corrosion protection DIN 51345	Pass all metals
Emulsion stability 25 days, 50°C DIN 51346	1A-1R (stable)
Bacteria and Fungi	Contains preservative



QUINTOLUBRIC® 815

FIRE RESISTANT HFA-E HYDRAULIC FLUID

APPLICATION SHEET

FLUID MAINTAINANCE

As a service to customers and to assure the troublefree performance of the roof support fluid, Quaker recommends a program of regular fluid analysis. Quaker will perform normal fluid analysis. Contact your local Quaker Representative to set up an analysis program. Quaker will provide sample bottles with shipping material and will provide the recommended fluid analysis free of charge. Complete details of the fluid analysis program (including normal operating ranges and sample reports) will be provided with the OperationManual for the fluid.

PACKAGING AND STORAGE

For cost effectiveness, Quaker recommends plastic storage tanks for bulk storage of the QUINTOLUBRIC® 815 concentrate. If a metal tank is used, no zinc-containing coating should be used on the inside of the tank. The tank and hatchway design should be such that ingress of water, dirt and other potential contaminates is minimized. The recommended storage temperature range is 0-30ºC