

PRODUCT INFORMATION

HYCUT – SYSTEM | PAGE 1 OF 2

HYCUT ET 46

is the power component for the HYCUT two-component-system. In combination with our HYCUT ADDITIV and mixed with water it forms a high-performance metal working emulsion, the concentrate can be used as machining oil or hydraulic oil.

BENEFITS

- Free from heavy metals, zinc, and chlorine compounds
- Suitable for demanding machining operations
- Outstanding lubricating performance
- Targeted control of the individual components enables easy adaptation to different processes
- Clean parts and machine by excellent washing action
- High degree of tramp oil separation, thus easy maintenance, and long service life
- Excellent foaming characteristics
- Good run off ensures low consumption
- Low emission (Noack at 250°C: 8.0%)
- Easy to clean with aqueous media (self-emulsifying)
- Compatible to the HYCUT – system
- Not cytotoxic (EN ISO 10993-5:2009)

DATA OF PRODUCT | CONCENTRATE

DETERMINATION	METHOD	UNIT	VALUE
Density, 20°C	DIN 51 757	[kg/m³]	924
Kin. viscosity, 40°C	DIN EN 16 896	[mm²/s]	46
Refractive index, n _D ²⁰	DIN 51 423	---	1.469

RECOMMENDED CONCENTRATION (DEPENDING ON APPLICATION AND CONDITIONS)

- Standard concentration at room temperature: 3.0 - 20.0%
(When using the HYCUT ADDITIV component at the same time.)
- Product can be use in a higher concentration. Please contact your coolant partner for more information.
- See also "Technical information: New fill of 2-component coolant".

SHELF LIFE | OPERATING AND STORAGE CONDITIONS

12 months under ambient storage conditions.

INDUSTRIAL HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION

For more details about health and safety please read the information on the safety data sheet.

DISPOSAL

In compliance with the local waste regulations.

HYCUT ET 46

use as a hydraulic oil.

BENEFITS

- Hydraulic oil of ISO VG 46 classification
- Very good wear protection due to high lubricant power
- Excellent washing power makes systems cleaner
- Outstanding corrosion protection
- Loss oil emulsifies into cutting fluids
- Not cytotoxic (EN ISO 10993-5:2009)

APPLICATION NOTES

Before use, please take note of our product information on procedure for “Changeover of a Hydraulic System to HYCUT ET 46”.

DATA OF PRODUCT | CONCENTRATE

DETERMINATION	METHOD	UNIT	VALUE
Kin. viscosity	at 40°C	DIN EN 16 896	[mm ² /s] 46
	at 100°C	DIN EN 16 896	[mm ² /s] 9
Viscosity index	ISO 2909	---	190
Pour point equal to or less than	DIN ISO 3016	[°C]	<-42
Flashpoint	DIN EN ISO 2592	[°C]	216
Particle distribution	ISO 4406	---	17/15/12
Corrosion protection properties, for steel	DIN 51585	---	0-A
Corrosion effect on copper	DIN EN ISO 2160	Corr. cat. (3h/100°C)	1a
Air separation capability at 50°C	DIN 51381-50	[Min.]	11
Mechanical test in FZG gear testing rig A 8,3/90 Damage level	DIN 51354-2	---	>12
Mechanical testing in vane impeller pump	Ring	DIN 51389-2	[mg] 7
	Vane	DIN 51389-2	[mg] 3
Ash (oxide ash) reported as % by weight	DIN EN ISO 6245	[%]	0.05
Neutralisation number (acid)	DIN 51558-1	[mgKOH/g]	1.7
Noack at 250°C	DIN 51 581-1	[%]	8