Gazpromneft Cutfluid Standard

Gazpromneft Cutfluid Standard – high quality mineral water-miscible cutting fluid with high oil content and a multifunctional additive package. The product has high emulsion stability and has increased stability against bio-damage.

Application

Gazpromneft Cutfluid Standard is recommended for blade machining of metals: turning operations, milling, drilling, countersinking, sawing of cast irons, mild and carbon steels, alloyed steels, various grades of aluminium and its alloys.

Advantages

- Excellent corrosion protection
- Increased resistance to biodamage
- High emulsion stability
- Long service life of working emulsion in machine tools
- Does not contain chlorine, phenol, secondary amines

Recommended concentrations of operating emulsion by operations

Operations	drilling, turning, milling	screw cutting, reaming
Operating emulsion concentration , %	5-7	6-8

Typical characteristics

Properties	Method	Gazpromneft Cutfluid Standard
Appearance	Visually	Homogeneous transparent liquid in brown color. Weak opalescence is allowed
Kinematic viscosity at 40 °C, mm^2/s	GOST 33	31,2
Density at 20°C, kg/m^3	GOST 3900	889
pH in 5% water emulsion	GOST 6243 clause 4	9,0
Refraction factor	Manufacturer data	1,0

GAZPROMNEFT – LUBRICANTS, LTD.
14/3, Krzhyzhanovskogo Street, Moscow, 117218 Russia
Tel: +7 (495) 642-99-69
Fax: +7 (495) 921-48-63

The above data are typical for the products currently available. Due to ongoing research and development, the information contained in the document is subject to change. Information on the safe use of the product is contained in the Safety Data Sheet. More detailed information can be obtained from the company's technical specialists. E-mail: Techservice@gazprom-neft.ru.
06/2024

Recommendations for storage, transportation, preparation and control of cutting fluids

The product is supplied to the consumer in the form of concentrate. It is recommended to store and transport at temperature from +5 to 35°C. The coolant should be stored in closed containers protected from direct sunlight and penetration of atmospheric precipitations and contaminants.

Preparation of working emulsion of cutting fluid is carried out by gradual addition and mixing of the calculated amount of concentrate into water (follow the sequence). For high-quality preparation of the working emulsion it is recommended to use special mixers (e.g. proportional dosing devices) when preparing the emulsion, use cool tap water. The temperature of water and concentrate should be in the range of +10°C...+30°C. If the temperature of the concentrate is lower than this, the viscosity will be higher and it will be more difficult to mix the components. Hot water should not be used, as the emulsion stability is impaired when the temperature rises.

Recommendations for adjusting the concentration of the operating emulsion

Formulas for calculating the concentration adjustment
(ω - concentration per cent, V – volume in liters)

Increased concentration is required

$$V_{emulsion\ added} = \frac{V_{emulsion\ poured}(\omega_{\ required} - \omega_{current})}{\omega_{emulsion\ added} - \omega_{\ required}}$$

Decreased concentration required

$$V_{emulsion\ added} = \frac{V_{emulsion\ poured}(\omega_{current} - \omega_{\ required})}{\omega_{required} - \omega_{emulsion\ added}}$$

Gazpromneft-Lubricants Ltd. recommends using emulsions with 12% concentration to increase the concentration of working emulsion, and it is recommended to use 1% emulsion to decrease the concentration of working emulsion.

Gazpromneft-Lubricants Ltd. does not recommend adding water in its purest form to decrease the concentration of the working emulsion, as in this case problems with the stability of the working emulsion may occur, which will negatively affect the processing of parts and equipment.

The company's management system is certified in accordance with the international standards

ISO 9001 ISO 14001 ISO 45001

GAZPROMNEFT – LUBRICANTS, LTD.
14/3, Krzhyzhanovskogo Street, Moscow, 117218 Russia
Tel: +7 (495) 642-99-69
Fax: +7 (495) 921-48-63

The above data are typical for the products currently available. Due to ongoing research and development, the information contained in the document is subject to change. Information on the safe use of the product is contained in the Safety Data Sheet. More detailed information can be obtained from the company's technical specialists. E-mail: Techservice@gazprom-neft.ru.
06/2024