Gazpromneft GK type 1, type 2

Gazpromneft GK type 1, type 2 – transformer oils developed from highly purified base components obtained by hydrocracking, isodeparaffinization and hydrotreating. The process of obtaining base components is intended to maximize the degree of purification to ensure excellent performance properties of Gazpromneft GK. The declared characteristics of Gazpromneft GK Mark 2 are confirmed by full compliance with the technical requirements of PAO ROSSETI

Features/Advantages/Potential benefits

- Conforms to Russian and international quality standards → tested in independent accredited laboratories ENGIE Laborelec Belguim and All-Russia Scientific Research Institute for Oil Refining → product quality assurance
- High dielectric strength → oil resistance to electrical voltage → operation in high voltage equipment
- Excellent electrical insulating properties → minimum dielectric dissipation factor → reduced energy losses
- High stability against oxidation → use of base oils produced by hydroprocessing improves antioxidation properties → oil life is up to 25-30 years with observance of operating conditions
- Excellent viscosity-temperature properties → base components ensure oil pumpability at low ambient temperatures and maintain viscosity stability at high temperatures → multigrade use in various climatic zones
- Preservation of operating characteristics when mixed with other products (mixing only after prior consultation with Gazpromneft-Lubricants specialists) → ability of refilling during replacement and operation → saving oil costs

Application

- In potential, converter, measuring transformers, reactors, autotransformers and bushings as long-life electrical insulating material
- Recommended for use in electrical equipment of higher voltage classes up to 1150 kV
- In oil circuit breakers as arc suppression medium
- Recommended in potential transformers at PAO ROSSETI's subsidiaries and affiliates (Gazpromneft GK Mark 2)

Specifications	Gazpromneft GK type 1	Gazpromneft GK type 2
PAO «Rosseti» (STO 34.01-23.1-001-2017)		✓
IEC 60296:2012	✓	✓
GOST R 54331-2011	✓	✓

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The information given above is typical for the currently manufactured products. Due to ongoing research and development works the information contained in the document is subject to change. Information on the safe use of the product can be found in the Safety Data Sheet. More detailed information can be obtained from the company's technical experts.
E-mail: Techservice@gazprom-neft.ru.11/2023

Typical characteristics

Parameters	Method	Gazpromneft GK Type 1	Gazpromneft GK Type 2
Kinematic Viscosity, mm²/s: - at 50°C - at -30°C	GOST 33	7,427 552	7,418 534
Density, kg/m³: - at 15°C - at 20°C	GOST R 51069 GOST 3900	836,6 833,2	836,2 832,8
Flash Point (COC), °C	GOST 6356	173	178
Pour point, °C	GOST 20287 method B or ASTM D 97	-40	-50
Total Acid Number, mg KOH/g	GOST 5985 or GOST 11362	0,0005	0,0005
Breakdown voltage, kV	GOST 6581 p. 4	Not less than 30	Not less than 30*
Dielectric dissipation factor at 90 °C, %	GOST 6581 p. 2	0,07	0,06
Oxidation stability (120°C, 500 h, 150 ml/h): - Total Acid Number after oxidation, mg KOH/g - Sludge, % weight - Dielectric dissipation factor at 90 °C, %	GOST R IEC 61125 method C or IEC 61125 method C	0,1 <0,01 0,3	0,1 <0,01 0,3
Oxidation stability (155°C, 14 h, 50 ml/min): - Low molecular weight volatile acids, mg KOH/g - Sludge, % weight - Total Acid Number after oxidation, mg KOH/g	GOST 981	0,025 0,005 0,05	0,025 0,005 0,05

*At the customer's request

Parameters	Method	Gazpromneft GK Type 2
Breakdown voltage, kV	GOST 6581 p. 4	70
Water content, mg/kg	GOST R IEC 60814	10
Purity class	GOST 17216	8

Certified

ISO 9001

ISO 14001

ISO 45001

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