



Shell GTL Fluid G70

Product Code	Q6527
Region	Global
Product Category	Synthetic Paraffins
CAS Registry Number	848301-67-7
EINECS Number	481-740-05

Description

Shell GTL Fluid G70 is a high performance fluid derived from natural gas feedstock converted into synthetic paraffins with state of the art catalyst technology. Because of this combination of gaseous feedstock and intensive process control, undesirable impurities (i.e. aromatics, olefins, sulfur, etc...) are virtually non-detectable.

This process technology delivers a unique mixture of inert C8-C26 synthetic paraffins which provide discerning users consistently with:

- clean burning characteristics
- low cloud/ freeze/ pour point
- low odor
- low toxicity
- low vapor pressure
- low viscosity
- ready biodegradability

Shell GTL Fluid G70 is part of the Shell GTL Fluids range of products which can be provided in varying flash points and viscosities.

Typical Properties

Property	Unit	Method	Value
API Gravity	-	ASTM D4052	50.5
Specific Gravity @15.6°C/15.6°C [60°F/60°F]	-	ASTM D4052	0.777
Density @15.6°C [60°F]	kg/L	ASTM D4052	0.777
Density @15.6°C [60°F]	lb/gal	ASTM D4052	6.48
Density @15°C	kg/m ³	ASTM D4052	778
Coefficient of Cubic Expansion @20°C	10 ⁻⁴ /°C	Calculated	9
Refractive Index @20°C	-	ASTM D1218	1.435

Color	Saybolt	ASTM D156	+30
Copper Corrosion (1hr @100°C)	-	ASTM D130	1a
Distillation, Initial Boiling Point	°C	ASTM D86	179
Distillation, Final Boiling Point	°C	ASTM D86	343
Relative Evaporation Rate (nBuAc=1)	-	ASTM D3539	< 0.01
Relative Evaporation Rate (Ether=1)	-	DIN 53170	> 3900
Vapor Pressure @20°C	kPa	Calculated	0.02
Vapor Pressure @50°C	kPa	Calculated	< 0.01
Saturated Vapor Concentration @20°C	g/m ³	Calculated	1.7
Volatile Organic Compound (VOC)	g/L	EU / EPA	777
Paraffins	% m/m	GC	98
Naphthenes	% m/m	GC	2
Aromatics	mg/kg	SMS2728	< 500
Benzene	mg/kg	GC	< 5
Sulfur	mg/kg	ISO 20846	< 1
Flash Point	°C	ASTM D93	73
Flame Sustainability @75°C	-	ISO 9038	Pass
Lower Explosion Limit in Air	% v/v		0.5
Upper Explosion Limit in Air	% v/v		6.0
Auto Ignition Temperature	°C	ASTM E659	205
Electrical Conductivity @25°C	pS/m	IEC 60247	< 0.1
Electrical Constant @25°C	-	IEC 60247	2.05
Breakdown Voltage	kV/2.5mm	ASTM 1816	66
Ash content	% m/m	ISO 6245	< 0.001
Smoke Point	Mm	ASTM D1322	> 50
Aniline Point	°C	ASTM D611	95
Kauri-Butanol Value	-	ASTM D1133	24
Cloud Point	°C	ASTM D2500	-18
Cold Filter Plugging Point	°C	IP 309	-18
Pour Point	°C	ASTM D97	-36
Hildebrand Solubility Parameter	(cal/cm ³) ^{1/2}	-	7.5
Hydrogen Bonding Index	-	-	0
Fractional Polarity	-	-	0
Surface Tension @20°C	mN/m	-	28
Viscosity @25°C	mm ² /s	ASTM D445	3.9

Viscosity @40°C	mm ² /s	ASTM D445	2.6
Molecular Weight	g/mol	Calculated	209

Test Methods

Copies of copyrighted test methods can be obtained from the issuing organisations:

American Society for Testing and Materials (ASTM) : www.astm.org
 International Electrotechnical Commission (IEC) : www.iec.ch
 International Organization for Standardization (ISO) : www.iso.org
 Deutsches Institut für Normung (DIN) : www.din.de

Shell Method Series (SMS) methods are issued by Shell Global Solutions International B.V., Shell Technology Centre, Amsterdam, The Netherlands. Requests for copies of SMS can be made through your local Shell Chemicals company.

N.B: For routine quality control local test methods may be applied. Such methods have been validated against those mentioned in this datasheet.

Quality

Shell GTL Fluid G70 does not contain detectable quantities of heavy metals and chlorinated compounds.

Hazard Information

For detailed Hazard Information please refer to the Safety Data Sheet on www.shell.com/chemicals.

Storage Handling

Provided proper storage and handling precautions are taken we would expect Shell GTL Fluid G70 to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Safety Data Sheet on www.shell.com/chemicals.

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