

# Alusynt® FGC

HIGH PERFORMANCE FOOD-GRADE SYNTHETIC OILS FOR COMPRESSORS AND VACUUM PUMPS

**DESCRIPTION** Alusynt® FGC are **food-grade, synthetic** lubricants, Registered in Category H1 by NSF INTERNATIONAL (USA) (see website <http://www.nsf.org/USDA/Listings.asp?Company=N10201>), suitable for applications where incidental contact with food may occur.

Aluchem products and plants have been also **Kosher** certified.

**PROPERTIES** Alusynt® FGC offer: minimum deposit formation, high viscosity index, enabling operation in a wide temperature range, a very strong oil film, outstanding anti-wear and corrosion protection, high demulsibility, very low pour point, enhanced anti-foam capacity, a high level of machinery cleanliness, total compatibility with metals and elastomers.

Alusynt® FGC synthetic have been developed to withstand the most severe operating conditions, even in high temperature and air pressure environments.

Service life is several orders of magnitude longer than mineral oils.

Maintenance costs, both planned and incidental, are kept to a minimum.

- APPLICATIONS**
- **Alusynt® FGC 32** Centrifugal compressors (24.000 hrs), vacuum pumps operating at low temperature (up to 3.000 hrs), microfog lubricators.
  - **Alusynt® FGC 46** Oil-lubricated screw compressors (6-8.000 hrs), vane vacuum pumps (up to a 3.000 hrs), small bore reciprocating compressors (up to 5.000 hrs).
  - **Alusynt® FGC 68** High temperature, oil-lubricated screw compressors (6-8.000 hrs), oil-free screw compressors (24.000 hrs), vane vacuum pumps (up to a 3.000 hrs).
  - **Alusynt® FGC 100** Reciprocating and vane compressors and vacuum pumps (1.000 to 3.000 hrs, depending on application);
  - **Alusynt® FGC 150** lobe blowers, also at high ambient temperature.

For air compressors in critical/heavy-duty condition, Aluchem have also developed **Alusynt® FGC P**, with superior performance in terms of ageing resistance and service life (see the relevant TDS).

PTO

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The data in this product information is based on our general experience and knowledge. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary tests with the selected.

# Alusynt<sup>®</sup> FGC

Property	Method	Unit	Typical values				
			32	46	68	100	150
ISO VG grade	ASTM D 2422	-	32	46	68	100	150
Operating range	-	°C	- 50 ÷ 160	- 45 ÷ 160	- 45 ÷ 160	- 40 ÷ 180	- 30 ÷ 180
Kinematic Viscosity at 40°C	ASTM D 445	mm <sup>2</sup> /s	32,54	46,12	67,84	101,7	151,3
Kinematic Viscosity at 100°C	ASTM D 445	mm <sup>2</sup> /s	6,15	7,78	10,26	13,7	18,36
Viscosity Index	ASTM D 2270	-	140	138	137	136	136
Pour point	ASTM D 97	°C	- 57	- 54	- 54	- 48	- 39
Total Acid Number (TAN)	ASTM D 664	mgKOH/g	< 0,1				
Flash point (C.O.C.)	ASTM D 92	°C	225	230	230	232	246
Evaporation loss, 22 hrs at 99 °C	ASTM D 972	% wt	1	1	1	1	1
Demulsibility - oil/water/emulsion (time)	ASTM D 1401	ml/ml/ml (minutes)	40/40/0 (10)	40/40/0 (10)	40/40/0 (10)	40/40/0 (15)	40/40/0 (15)
Foaming, Sequence I, II,III	ASTM 892	ml/ml	0/0	0/0	0/0	0/0	0/0
Specific gravity at 20°C	ASTM D 1298	g/cm <sup>3</sup>	0,835	0,840	0,845	0,850	0,855

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