

****CERTIFICATE OF QUALITY****

Control No: 3254/2006

Draw certificate date:
Publish date:

12/12/06
16/02/07

For:
Packing, Tank
Reservoir: 15S013
Batch:

002

LOTOS TRAFFIC THERMAL CONTROL SL/CF

V

Lp.	PROPERTY	TEST METHOD	UNITS	RESULTS
1	Viscosity at 100 C	EN-ISO 3104:1999	mm ² /s	14.12
2	Pour Point	ASTM D 5950-02	deg C	-42
3	Flash Point COC	ASTM D 92-02b	deg C	226
4	Density, at 15 deg C	EN ISO 12185:1996	g/cm ³	0.8574
5	Visc.CCS at -30 C	ASTM D 5293	mPa*s	6600
6	Viscosity at 40 C	ASTM D 445-04	mm ² /s	83.85
7	Viscosity HTHS at 150 C (at 10 ⁶ s ⁻¹)	ASTM D 4741	mPa*s	3.68
8	Shear Stability	IP 294		
	-Visc.kinem.temp.100C, 30 Shear Cycles	ASTM D 445-04	mm ² /s	13.97
9	Viscosity MRV at -35 C	ASTM D 4684	mPa*s	29600
10	Viscosity Index	ASTM D 2270-04		175
11	Water	ASTM D 95-99		none
12	Total Base Number (TBN)	ASTM D 2896-03	mg KOH/g	10.25
13	Sulfated Ash	ASTM D 874-00	% wt	1.04
14	Phosphorus	ASTM D 1091	% wt	0.095
15	Calcium	DIN 51391 T-1	% wt	0.134
16	Zinc	DIN 51391 T-1	% wt	0.108
17	Magnesium	DIN 51431	% wt	0.103
18	Corrosion action Cu in 120 deg C 3 h	ASTM D 130-04	deg Cor.	1
19	Evaporation loss Noack	DIN 51581	% wt	8.9
20	Foaming	ASTM D 892		
	-tendency at 25 deg C		ml	0
	-tendency at 95 deg C		ml	10
	-tendency at 25 deg C ex 95 deg C		ml	0
21	Stability -10 min.	ASTM D 892		
	-at 25 deg C		ml	0
	-at 95 deg C		ml	0
	-at 25 deg C ex 95 deg C		ml	0

Certificate of Quality may be duplicated only as a whole.

Test were run in LOTOS Lab Sp. z o.o.

Product does meet requirements of the contract: WT 4/01 wyd.4

Confirm certificate - name: :J.Lendasz

Publish certificate - name: :S.Gliwiński