

ANALYTICAL REPORT No: 0759-LQ-14

Client SIBUR International GmbH

S-Peterburg no. 7652-0488-14/4 **Date of report** 01.08.2014

Object ZAO "Sibur-Khimprom"

Location s. Perm

Product : s. Perm	Alcohol - ether	eal concentrate gra	ade A ¹	Received: 23	.07.2014		
Sample Drawn :		ted and provided c		ativ			
Sample Description :	Clear, straw-co	olored liquid					
Testing Performed By:	Intertek S-Petersburg Laboratory Date: 23÷29.07.2014						
Tests	Units	Method ²	Specification limits	Result	Result Within Specification		
Density at 15 º C	kg/m ³	ASTM D 4052	unknown	836.6	_		
Appearance		Visual	unknown	Clear & Bright	_		
Sulphur content	% mass	ASTM D 4294	unknown	less 0.0150	_		
Sulphur content	mg/kg	ASTM D 5453	unknown	less 1.0	_		
Vapour Pressure RVP	kPa	ASTM D 323	unknown	3.0	_		
Water content (Karl Fischer Method)	mg/kg (%mass)	ASTM D 6304	unknown	5245 (0.5)	_		
Existent gum content (solvent washed)	mg/100 ml	ISO 6246	unknown	5.2	_		
Benzene content	%(V/V)	ASTM D 6839/ EN ISO 22854	unknown	0.92	_		
Hydrocarbon type content:		ASTM D 6839/					
Aromatics	%(V/V)	EN ISO 22854	unknown	42.54	_		
Olefins	%(V/V)		unknown	2.84	_		
Oxygenates content	%(V/V)	ASTM D 6839/ EN ISO 22854	unknown	54.22	_		
Research Octane number (RON)		calculated	unknown	about 100 ³	_		
Motor Octane number (MON)		calculated	unknown	about 100 ³	_		
Oxidation stability	min	ASTM D 525	unknown	more 1500	-		
Copper strip corrosion (3 h at 50 °C)	rating	ASTM D 130	unknown	1A	_		
Distillation (760 mm Hg)		ASTM D 86	unknown				
Initial bolling point (IBP)	oC.		unknown	111.0	_		
5% vol recovered	oC.		unknown	115.5	_		
10% vol recovered	oC.		unknown	118.0	_		
20% vol recovered	oC.		unknown	120.5	_		
30% vol recovered	oC.		unknown	123.0	_		
40% vol recovered	oC.		unknown	126.5	_		
50% vol recovered	oC.		unknown	131.0	_		
60% vol recovered	oC.		unknown	140.0	_		
70% vol recovered	oC.		unknown	151.0	_		
80% vol recovered	oC.		unknown	160.0	_		
90% vol recovered	oC.		unknown	167.0	_		
95% vol recovered	°C		unknown	177.0			
Final Boiling Point (FBP)	oC.		unknown	201.0	_		
Losses	% vol		unknown	1.0	_		
Residue	% vol	<u> </u>	unknown	1.0			
Colour ASTM		ASTM D 1500	unknown	less 0.5	_		
Total Contamination	mg/kg	EN 12662	unknown	less 6.0 (3)	_		
Lead content	mg/kg	ASTM D 3605 mod	unknown	less 0.25	-		

Tests	Units	Method ²	Specification limits	Result	Result Within Specification
Smell		Organoleptic	unknown	Dominated by the smell of ether	_

Note 1. This product is not included in the Scope of accreditation laboratory.

Note2. All these methods are intended to record for analysis of Petroleum Products. Sample testing is proposed for petrochemicals. Thus, the results can not be interpreted as the results obtained in the framework of the above methods. Terms perform some tests had to pick from the properties of the product.

Note 3. Calculate more precisely is not possible.

INTERTEK S-Petersburg

LABORATORY MANAGER: P.Obukhova

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