

**CERTIFICATE OF QUALITY**

<b>VESSEL</b>	TMS ALNIKA
<b>CARGO</b>	GASOLINE SM EN 228
<b>SHORETANK No.</b>	B87
<b>BL DATE</b>	18-09-2024
<b>BL NUMBER</b>	209
<b>PORT</b>	MIDIA, ROMANIA
<b>BERTH</b>	9B
<b>OPERATION</b>	LOADING

**TO IM ROMPETROL MOLDOVA SA**

PROPERTY	UNITS	VALUE	METHOD	RESULT
DENSITY AT 15 DEG C	KG/M3	720-775	EN ISO 3675 / EN ISO 12185	747.2
RESEARCH OCTANE NUMBER	RON	95 MIN	EN ISO 5164	96.7
MOTOR OCTANE NUMBER	MON	85 MIN	EN ISO 5163	85.2
LEAD CONTENT,	MG/L	5 MAX	EN 237	<2.5
BENZENE CONTENT	% V/V	1 MAX	EN 22854 / EN 12177	0.83
OLEFINS,	% V/V	18 MAX	ASTM D 1319 / EN 22854	13.2
AROMATICS,	% V/V	35 MAX	ASTM D 1319 / EN 22854	30.1
DISTILLATION			EN ISO 3405	
EVAPORATED AT 70 DEG C	% V/V			
A) SUMMER		20-48		31.2
B) WINTER		22-50		
EVAPORATED AT 100 DEG C	% V/V	46-71		56.2
EVAPORATED AT 150 DEG C	% V/V	75 MIN		86.5
FINAL BOILING POINT	DEG C	210 MAX		204.5
RESIDUE OF DISTILLATION	% V/V	2 MAX		1.1
REID VAPOR PRESSURE	KPA		EN 13016-1	
A) SUMMER		45-60		58.7
B) WINTER		60-90		
SULPHUR CONTENT,	MG/KG	10 MAX	EN ISO 20846	4.1
OXIDATION STABILITY	MINUTES	360 MIN	EN ISO 7536	>900
COPPER STRIP CORROSION RATING (3HRS AT 50 DEG C)		CLASS 1	EN ISO 2160	1b
EXISTENT GUMS CONTENT (SOLVENT WASHED),	MG/100 ML	5 MAX	EN ISO 6246	1.0
VLI (VAPOR LOCK INDEX)			CALCULATED	
A) SUMMER		1000 MAX		805
B) WINTER		1150 MAX		
ASPECT		CLEAR AND BRIGHT	VISUAL INSPECTION	CLEAR AND BRIGHT
OXYGEN CONTENT	% M/M	2.7 MAX	EN 1601 / EN 13132 / EN 22854	2.14
OXIGENATE COMPONENTS			EN 1601 / EN 13132 / EN 22854	
METHANOL	% V/V	3 MAX		0.04
ETHANOL	% V/V	5 MAX		0.03
ISO PROPYL ALCOHOL	% V/V	10 MAX		<0.03
ISO BUTYL ALCOHOL	% V/V	10 MAX		<0.03
TERT BUTYL ALCOHOL	% V/V	7 MAX		0.04
ETHERS	% V/V	15 MAX		11.56
MTBE content	% V/V			11.46
ETBE content	% V/V			0.10
TAME content	% V/V			<0.03
OTHERS	% V/V	10 MAX		<0.03

VLI = 10 x RVP + 7 x (% at 70 degC)

Winter: 16th November - 14th March

Summer: 1st May - 30th September

Transition: 15th March - 30th April; 1st October - 15th November RVP 45-90

**Sample Origin: SHORE TANKS COMPOSITE BEFORE LOADING****Tests were performed in ROMPETROL LABORATORY and witnessed by GKV inspectors.**

When analysis witnessed by G.K.V. Ltd. Inspector, our responsibility is solely to ensure that the analysis is conducted to standard test methods according with accepted industry practice. We are not responsible for apparatus, instrumentation and measuring devices. Reagents and solutions are accepted as prepared.

For G.K.V. Ltd.  
Independent Inspector at Loading Port

Name *Teodor Zefir*  
Dated 18-09-2024