



ANNEXE VI – BIJLAGE VI Kroon Oil Belgian Rally Championship 2023

Le fournisseur d'essence agréé par le RACB Sport pour le Kroon Oil Belgian Rally Championship 2023 est :

GUTTS b.v.

Prendre contact sur le site Guts : <https://guts.be/shop/refueling-services/>

De goedgekeurde brandstof leverancier door RACB Sport voor het Kroon Oil Belgian Rally Championship 2023 is :

GUTTS b.v.

Neem contact op met de website van Guts : <https://guts.be/shop/refueling-services/>

The appointed fuel supplier, certified by RACB Sport, for the Kroon Oil Belgian Rally Championship 2023 is:

GUTTS b.v.

Contact them via their website: <https://guts.be/shop/refueling-services/>

Fuel types:

FUEL TYPE 1 : Petrochem Carless Hiperflo Turbo Ultimate Dev2 :

FUEL TYPE 2 : Guts E85R

FUEL TYPE 3 : 98 octane fuel sold at the commercial petrol station designated by the rally organizer.

Appendixes: Products Specifications for fuel types 1 & 2

Certificate 000000000000

Date: 02/02/2017
Customer PO:
Delivery Note:
Order No.:
Customer No.:

GMID: 2010901
Material: Hiperflo TURBO ULTIMATE DEV2
Bulk
Cust. Mat.:
Batch: 0000013236
Dlvy. Qty: 0.0

Container ID:
Ship from:

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Feature	Units	Results	Limits Minimum	Maximum	Method
Density 15°C	kg/m3	764.8	720.0	785.0	ASTM D4052
R.O.N (corrected)		101.7	95.0	102.0	EN ISO 5164
M.O.N. (corrected)		86.6	85.0	90.0	EN ISO 5163
Vapour pressure (DVPE) 37.8°C	kPa	66.7	-	80.0	ASTM D5191
I.B.Pt.	°C	36.9			ASTM D86
10% v/v Evaporated at	°C	46.4			ASTM D86
50% v/v Evaporated at	°C	64.1			ASTM D86
90% v/v Evaporated at	°C	124.7			ASTM D86
% Evaporated at 70°C, E70	%(V)	55.9			ASTM D86
% Evaporated at 100°C, E100	%(V)	69.1	30.0	72.0	ASTM D86
% Evaporated at 150°C, E150	%(V)	> 98.5	75.0	-	ASTM D86
% Evaporated at 180°C	%(V)	> 98.5			ASTM D86
F.B.Pt.	°C	139.5	-	210.0	ASTM D86
Residue	%(V)	0.8	-	2.0	ASTM D86
Aromatics	%(V)	34.7	-	35.0	ASTM D1319
Olefins	%(V)	15.4	-	18.0	ASTM D1319
Benzene content	%(V)	< 0.1	-	1.0	EN 238
Nitrogen	mg/kg	< 40	-	500	ASTM D5762
Lead content	mg/l	< 2.5	-	5.0	EN 237
Sulphur content	mg/kg	< 3.0	-	10.0	ASTM D5453
Electrical Conductivity	pS/m	> 2000	200	-	ASTM D2624
Oxidation Stability	min.	> 360	360	-	ASTM D525
Oxygen Content	%(m)	3.30	-	3.70	ELEMENTAL
ANALYSIS					
Carbon Content	%(m)	84.67			ASTM D5291
Hydrogen Content	%(m)	12.03			ASTM D5291
Atomic H/C Ratio		1.6930			CALCULATION
Atomic O/C Ratio		0.0293			CALCULATION
C/H Mass Ratio		7.04			CALCULATION
Stoichiometric Air/Fuel Ratio		13.73			SAE J1829

Feature	Units	Results	Limits		Method
			Minimum	Maximum	
Gross Heat of Combustion	MJ/kg	43.96			IP 12
Net Heat of Combustion	MJ/kg	41.41			IP 12
Diolefin content	%(m)	< 1.0	-	1.0	GC-MS

COA Additional Information

The certificate is electronically generated and valid without signature.

For inquiries please contact Customer Service or local Sales

Specification Sheet E85R

Test description	Method	Value
Octane (R+M)/2	Calculate	107
Research Octane	ISO 5164	110
Motor Octane	ISO 5163	105
Stoichiometric Air/Fuel Ratio	Calculate	9,56
Oxygen (weight%)	Calculate	29,9
Lower Heating Value (Btu/Pound)	Calculate	14560
Specific Gravity	ASTM D 4052	0,7838
DVPE (kPa)	EN 13016	44,4
Distillation at 760mm pressure	EN 3405	
Initial boiling point		43,7
10% evaporated		74,1
50% evaporated		77,6
90% evaporated		78,5
Final boiling point		144,7
Ethanol (volume%)	EN 15721	84-85
Methanol	EN 15721	>0,1
Higher Saturated mono-alcohols (c3-c5)	EN 15721	>0,1
Ethers (c5+)	EN 15721	>2
Color	SGS SPI 402	Colourless