

Haltermann Carless UK LTD. Grove House Guildford Rd, Leatherhead,
Surrey, KT22 9DF UK

SINETICA LDA
RUA DA ESTRADA NOVA 1096
3886-909 ESMORIZ
PORTUGAL

Certificate 10000163930

Date: 11/11/2019
Customer PO: 2019B02/145
Delivery Note: 80141588 000010
Order No.: 66135712 000010
Customer No.: 1763583

GMID: 2014228
Material: Hiperflo 300
25 Litre Can

Revision No.: 2

Cust. Mat.:
Batch: 0000025199
Dlvy. Qty: 1.600,0 L15
Container ID: CMAU197300/8
Ship from: Harwich

Harwich, ES, United Kingdom

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Feature	Units	Results	Limits		Method
			Minimum	Maximum	
Density 15°C	kg/m3	746,1	720,0	775,0	ASTM D4052
R.O.N (corrected)		100,8	100,0	102,0	EN ISO 5164
M.O.N. (corrected)		89,9	88,0	90,0	EN ISO 5163
Sensitivity (RON-MON)		10,9	10,0	-	EN ISO 5164-5163
I.B.Pt.	°C	35,4			ASTM D86
10% v/v Evaporated at	°C	52,5			ASTM D86
50% v/v Evaporated at	°C	80,7			ASTM D86
90% v/v Evaporated at	°C	122,7			ASTM D86
% Evaporated at 70°C, E70	%(V/V)	37,8	20,0	48,0	ASTM D86
% Evaporated at 100°C, E100	%(V/V)	68,4	46,0	71,0	ASTM D86
% Evaporated at 150°C, E150	%(V/V)	> 98,7	75,0	-	ASTM D86
F.B.Pt.	°C	> 143,7	-	210,0	ASTM D86
Residue	%(V/V)	0,9	-	2,0	ASTM D86
Vapour Lock Index [10xVP+7xE70°C]		830			CALCULATION
Vapour pressure (DVPE) 37.8°C	kPa	56,5	45,0	70,0	ASTM D6378
Aromatics	%(V/V)	31,7	-	35,0	ASTM D1319
		Corrected for Oxygenates			
Olefins by FIA	%(V/V)	1,7	-	18,0	ASTM D1319
		Corrected for Oxygenates			
Benzene content	%(V/V)	< 0,1	-	0,1	EN 238
Sulphur Content	mg/kg	6,0	-	10,0	IP 490
Lead Content	mg/l	< 2,5	-	2,5	EN 237
Phosphorous Content	mg/l	< 0,20	-	1,30	ASTM D3231
Manganese Content	mg/l	0,70	-	1,00	ASTM D3831
Nitrogen	mg/kg	< 40	-	75	ASTM D5762
Peroxides	mg/kg	0,30	-	50,00	ASTM D3703
Oxidation Stability	min.	> 480	480	-	ASTM D525
Gum, - washed	mg	1,0	-	4,0	ASTM D381
		per 100ml			
Copper Corrosion, 3hrs at 50°C	-	1A	-	-	ASTM D130
Electrical Conductivity	pS/m	> 2000	200	-	ASTM D2624

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Delivery item/date
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Feature	Units	Results	Limits		Method
			Minimum	Maximum	
Ethanol (Bio)	%(V/V)	0,3	-	5,0	EN 13132
ETBE (Bio)	%(V/V)	15,3	-	15,5	EN 13132
Oxygen Content	%(m/m)	2,55	1,80	2,70	EN 13132
Carbon Content	%(m/m)	85,05			ASTM D5291
Hydrogen Content	%(m/m)	12,40			ASTM D5291
C/H Mass Ratio		6,86			CALCULATION
Atomic H/C Ratio		1,7373			CALCULATION
Atomic O/C Ratio		0,0225			CALCULATION
Stoichiometric Air/Fuel Ratio		13,93			SAE J1829
Gross Heat of Combustion	MJ/kg	44,76			IP 12
Net Heat of Combustion	MJ/kg	42,13			IP 12

COA Additional Information

The certificate is electronically generated and valid without signature.

Haltermann Carless UK Ltd.

For enquiries please contact Customer Service or local Sales