



En février 2026, le laboratoire indépendant et accrédité Bureau Veritas a analysé un échantillon de DMA amélioré avec la **Technologie des Enzymes XBEE**.

L'analyse démontre que ce carburant est en conformité avec la norme DMA ISO 8217:2017.

Conclusions :

Les essais ont été réalisés après incorporation d'une dose volumétrique de 1/4000 de l'additif XBEE, suivie d'une période de conservation de l'échantillon à température constante de deux semaines. L'échantillon additivé par la technologie XBEE est conforme aux limites fixées par les spécifications DMA de la norme ISO 8217:2017.

Analyses	Normes	Sans XBEE	Avec XBEE	Unités	Limites
Aspect	Visuelle	Clair et limpide	Clair et limpide	-	Clair et limpide
Densité à 15°C	EN ISO 12185	879.40	879.50	kg/m ³	890.00 max
Indice de cétane calculé	ISO 4264	44.1	46.3	index	40.00 min
Viscosité à 40°C	EN ISO 3104	5.902	5.911	mm ² /s	2.00-6.00
Point éclair	EN ISO 2719	90.0	90.5	°C	60.0 min
Stabilité à l'oxydation, 95°C	EN ISO 12205	3	17	g/m ³	25 max
Teneur en soufre (EDF)	EN ISO 8754	0.086	0.084	% (m/m)	1.00 max
Cendres	ISO 6245	<0.001	<0.001	% (m/m)	0.01 max
Résidu de carbone (10%)	EN ISO 10370	0.04	<0.01	% wt	0.30 max
H.F.R.R.	ISO 12156-1	332	338	µm	520 max
H ₂ S	IP 570 – Proc. A	<0.60	<0.60	mg/kg	2.00 max
Acidité	ASTM D664	0.03	0.03	mgKOH/g	0.5 max
Point de trouble	EN 23015	+10	+7	°C	-
Température limite de filtrabilité	EN 116	+1	+3	°C	-
Point d'écoulement	ISO 3016	-21	-21	°C	0 max

Annexes

Rapports originaux

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Certificate of Analysis

Our ref	BEANT-25-11573-XXV1999874	Asset	Submitted Sample
Location	Not specified	Seals	None
Product	DMA	Packed	Plastic
Reference id	XBEE	Submitted by	Ourselves
Sample received	13-02-2026	End of analysis	17-02-2026
Subject	Submitted samples		
Sample from	Sample as received		

Test	Method	Unit	Result
Viscosity at 40 °C (a)	EN ISO 3104	mm ² /s	5.902
Density at 15 °C (a)	EN ISO 12185	kg/m ³	879.4
Cetane Index (four equation)	ISO 4264		44.1
Sulphur (EDF) (a)	EN ISO 8754	%m/m	0.086
Flash Point PM - proc. A (a)	EN ISO 2719	Deg C	90
Hydrogen Sulphide	IP 570 - Proc. A	mg/kg	<0.60
Acid number	ASTM D664	mg KOH/g	0.03
Oxidation Stability, 95 °C	EN ISO 12205	g/m ³	3
MCR on 10 % residue	EN ISO 10370	% m/m	0.04
Cloud Point (a)	EN 23015	Deg C	10
Cold Filter Plugging Point (a)	EN 116	Deg C	1
Pour Point - Upper (a)	ISO 3016	Deg C	-21
Appearance	Visual		Clear&Bright
Ash content	ISO 6245	% m/m	<0.001
Lubricity, method HFRR	ISO 12156-1	micron	332

*Unless specified, the latest version at our disposal of the test methods has been used.
The results relate only to the items tested.*

AUTHORIZATION

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Method Validation data is available upon request.

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Certificate of Analysis

Our ref	BEANT-25-11573-XXV1999881	Asset	Submitted Sample
Location	Not specified	Seals	None
Product	DMA with XBEE additive doping	Packed	Plastic
Reference id	XBEE	Submitted by	Ourselves
Sample received	13-02-2026	End of analysis	04-03-2026
Subject	Submitted samples		
Sample from	Sample as received		

Test	Method	Unit	Result
Viscosity at 40 °C (a)	EN ISO 3104	mm ² /s	5.911
Density at 15 °C (a)	EN ISO 12185	kg/m ³	879.5
Cetane Index (four equation)	ISO 4264		46.3
Sulphur (EDF) (a)	EN ISO 8754	%m/m	0.084
Flash Point PM - proc. A (a)	EN ISO 2719	Deg C	90.5
Hydrogen Sulphide	IP 570 - Proc. A	mg/kg	<0.60
Acid number	ASTM D664	mg KOH/g	0.03
Oxidation Stability, 95 °C	EN ISO 12205	g/m ³	17
MCR on 10 % residue	EN ISO 10370	% m/m	<0.01
Cloud Point (a)	EN 23015	Deg C	7
Cold Filter Plugging Point (a)	EN 116	Deg C	3
Pour Point - Upper (a)	ISO 3016	Deg C	-21
Appearance (a)	Visual		clear&bright
Ash content	ISO 6245	% m/m	<0.001
Lubricity, method HFRR	ISO 12156-1	micron	338

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