

Technical Information

Baynox Plus Solution

Article No.:

56194855

Form supplied:

LIQUID

1 kg contains min. 200g Baynox plus dissolved in bio-diesel

CAS-Nr.: 067762-40-7

6,6'-Di-tert.-butyl -2,2'-methylen-di-p-kresol

Ber = NET

Germ. : Baynox Plus solution

Fr. : Solution de Baynox Plus

Span. : Baynox Plus solucion

Port. : Baynox Plus solucion

Produktbeschreibung:

Clear, slightly yellow to reddish liquid with a specific odour of biodiesel

Valid from: 2007-10-15

Cancels edition dated: 2006-08-08

Reason for issue: Supplementation field dosage recommendations

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Baynox Plus Solution

Spezifikation :

Appearance :	conforms with product description
Content of active ingredient :	min. 20 % g/g

Specification values are subject of constant monitoring.

Characteristic data :

Miscibility :	Not miscible with water Micsible with all proportions of biodiesel
Density (20 °C) nach DIN 51757 :	0,89 kg/l
Ash content :	max. 200 ppm

Characteristic data provide further information about the product and are not subject to constant monitoring. They are therefore not binding (see notes in last section).

Uses :

Baynox plus solution is suitable for the stabilization of biodiesel. Baynox plus solution improves the stability values in the Rancimat test according to DIN EN 14214.

Baynox plus solution is particularly recommended for biodiesel from vegetable oils with a high content of multiple unsaturated fatty acids and an iodine number of >120.

The dosage and the compatibility with the customer's biodiesel should be tested in lab trials.

Baynox plus solution prevents the air oxidation of biodiesel; the stability values in the Rancimat test are improved clearly.

The effect of Baynox plus with increasing doses is not reduced, unlike many other antioxidants.

The strong effect of Baynox Plus solution is not reduced even with higher dosages. Unstable biodiesel becomes quickly rancid. It develops free fatty acids, which lead to corrosion damages at the engine, in particular at the injection system. At the same time Baynox Plus Solution inhibits the formation of insoluble crosslinked polymers due to oxidation of the biodiesel, which lead

Baynox plus solution received the "no harm" status from OMV Refining & Marketing, Austria. Thereby it is suitable as antioxidant for biodiesel for blending into petroleum diesel.

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Baynox Plus Solution

Uses:

Baynox Plus Solution is the ready to use 20% solution of Baynox Plus in biodiesel. Only biodiesel which complies with the DIN EN 14 214 is used to prepare the solution. Baynox Plus Solution may be produced with the customer's own biodiesel on demand. Baynox Plus Solution has almost the same density as biodiesel and is therefore easily miscible into biodiesel.

Baynox Plus Solution is miscible with all common CFPP improvers for biodiesel at common concentrations. Adverse effects have not been reported.

Verpackung und Lagerung :

20 m³ Iso-Container or cartanker, 1 m³-Container with 890 kg

Sample of 5 l on demand

Storage stability : max. 12 months

Transport, Toxizität und Gefahren :

At temperatures below 0°C part of the active ingredient might crystallize. On warming to 30-40°C it will redissolve quickly. Any precipitation and redissolving of the active ingredient does not influence the activity of Baynox Plus solution.

On standing Baynox Plus Solution might slowly change its colour to paint red. The increase in discolouring does not have any influence on the activity of the product.

Please see our EU-safety data sheet No. 56194855.

The aforementioned notices do not guarantee the general use of biodiesel from different origin in the used engines. This has to be tested and proved by the user and/or producer of the biodiesel under his own reliability. The car manufacturers guidance for the use of biodiesel has to be followed.

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Baynox Plus Solution

Dosing recommendations for BAYNOX® PLUS

Soymethylester SME

In order to obtain a biodiesel with a stability of at least 3 weeks starting from production, a rancimat value of > 10 hours in the Rancimat test is essential. To reach this value the following dosage recommendation of Baynox plus in relation to natural starting stability of the biodiesel should be followed.

Natural starting stability \geq 6 hours

Baynox® Plus: 400 ppm = 0.04% g/g or
Baynox® Plus Solution: (= 20 % Baynox® plus in biodiesel): 2.000 ppm = 0.20 %
(= 0.4 kg of Baynox® Plus or 2.0 kg of Baynox® Plus Solution per 1.000 kg of biodiesel)

Natural starting stability < 6 hours

For each hour rancimat value < 6 hours the Baynox® Plus dosage should be increased by 100pp/0,01% i.e. 500ppm/0,05% Baynox® Plus solution
(= 0.1 kg of Baynox® Plus or 0.5 kg of Baynox® Plus Solution per 1.000 kg of biodiesel)

Sojamethylester containing 25 - 50 % RME

The above dosage recommendations should be reduced by 100 ppm = 0.01% Baynox® Plus
(= 0.1 kg per 1.000 kg of biodiesel) or 500 ppm = 0.05% Baynox® Plus Solution (= 0.5 kg per 1.000 kg of biodiesel).

Sojamethylester containing 50 - 75 % RME

The above dosage recommendations should be reduced by 200 ppm = 0.02% Baynox® Plus (= 0.2 kg per 1.000 kg of biodiesel) or 1,000 ppm = 0.1% Baynox® Plus Solution (= 1.0 kg per 1.000 kg of biodiesel).

Example for calculations:

For a biodiesel with max. 75% of RME and an natural starting stability of 4 hours the for example following dosages result.

Baynox plus	Standard		400 ppm Baynox® Plus
	2 h Rancimat under 6 hours	+	200 ppm Baynox® Plus
	RME 75 %	-	200 ppm Baynox® Plus
	entire		400 ppm Baynox® Plus
	or		2,000 ppm Baynox® Plus Solution

Parts of Palmmethylester PME do not need to be considered.

SME with > 75 % RME and pure RME are not stabilized not with Baynox® Plus, but rather with Baynox®.

Recommendations on dosage check technical information on Baynox®.

Application reference: Please note that these dosing recommendation are only due to experiences out of lab tests results.

To the transfer these result on to a specific customer biodiesel qualities tests a the customer's side should be performed.

This information, with the exception of the data given in the section „Specification“, and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with our General Conditions of Sale and Delivery.

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