

Technical Information

Baynox

Article No.:

56206209

Form supplied:

PURE

CAS-Nr.: 000128-37-0

Butylhydroxytoluene

NET

Germ. : Baynox

Fr. : Baynox

Span. : Baynox

Port. : Baynox

Description:

White odourless crystals

Valid from: 2007-10-15

Cancels edition dated: 2006-08-08

Reason for issue: Supplementation field dosage recommendations

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Baynox

Specification :

Appearance :	conforms with product description
Content of active ingredient (GC, without residual solvent):	min 99,8%
Ash content (sulphated ash):	max 10 mg/kg

Specification values are subject of constant monitoring.

Characteristic data :

Solubility in biodiesel	200 g/kg
Density:	ca 1,03 g/ml
Bulk density:	ca.. 600 kg/m ³

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 is suitable for the stabilization of biodiesel. Baynox Solution improves the stability values in the rancimat test according to DIN EN 14214.

Baynox is particularly recommended for biodiesel from vegetable oils with a low content of multiple unsaturated fatty acids and an iodine number of <120. If the activity is not sufficient, it is recommended to use the stronger product Baynox Plus instead.

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

Baynox prevents the air oxidation of biodiesel; the stability values in the rancimat test are improved clearly. Unstable biodiesel becomes quickly rancid. It develops free fatty acids, which lead to corrosion damages of the engine, in particular at the injection system. At the same time Baynox inhibits the formation of insoluble crosslinked polymers due to oxidation of the biodiesel, which lead to deposits and to engine damages.

Baynox is compatible with common CFPP improvers for biodiesel. Adverse reactions have not been reported.

The active ingredient of Baynox (BHT) is recommended as antioxidant for biodiesel by the German AGQM-Biodiesel.

Baynox 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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Uses:

It is recommended to prepare a solution of 15-20% of Baynox in biodiesel, filter it through a (50µm-sieve) and do the dosing with the solution.

A ready to use solution of 20% of Baynox in Biodiesel is available under the product name of Baynox solution.

Standard packing and storage:

25 kg paper bags on pallets and 500 kg Big Bags
Samples on request

Storage stability ; max 24 months

Shipping, toxicity and hazards:

The storage of solution of Baynox in Biodiesel can be done in tanks, made from the same material as for tanks which are suitable for biodiesel itself.

Baynox is not marking required
Please not 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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Dosing recommendations for BAYNOX®

Rapemethylester RME

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 achieve this value following dosage recommendation of Baynox in relation to natural starting stability of the biodiesel is recommended.

Natural starting stability \geq 6 hours

Baynox : 400 ppm = 0.05% g/g or

Baynox Solution: (= 20 % Baynox in biodiesel): 2.500 ppm = 0.25 %

(= 0.5 kg of Baynox or 2.5 kg of Baynox Solution per 1.000 kg of biodiesel)

Natural starting stability < 6 hours

For each hour rancimat value < 6 hours the Baynox dosage should be increased by 100ppm/0,01% i.e.

500ppm/0,05% Baynox solution

(= 0.1 kg of Baynox or 0.5 kg of Baynox Solution per 1.000 kg of biodiesel)

Rapemethylester containing Soymethylester (SME) 20 - 25 %

The above dosage recommendations should be increased by 200ppm = 0.02% Baynox (= 0.2 kg per 1.000 kg of biodiesel) or 1.000 ppm = 0.1% Baynox Solution (= 1.0 kg per 1.000 kg of biodiesel).

Example for calculations:

For a biodiesel with max. 25% of SME and an natural starting stability of 4 hours the following dosages result.

Baynox	Standard	500 ppm Baynox
	2 h Rancimat under 6 hours	+ 200 ppm Baynox
	SME 20 %	+ 200 ppm Baynox
	entire	900 ppm Baynox
	or	4,500 ppm Baynox Solution

Parts of Palmmethylester PME do not need to be considered.

RME with > 25 % RME and pure SME are not stabilized not with Baynox , but rather with Baynox Plus. Recommendations on dosage check technical information on Baynox Plus.

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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