

Are you puzzled by the changes to the new Ecolabel criteria?

Eastman Optifilm™ enhancer 400: Lower emissions—Higher standards

Formulating with Optifilm enhancer 400 to meet new Ecolabel requirements

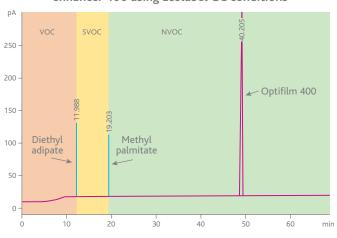
Optifilm enhancer 400: The ideal drop-in replacement

The current criterion for awarding the EU Ecolabel to paints and varnishes has recently been revised. As well as imposing further restrictions on existing in-can VOC content, the new criterion imposes restrictions on the semi-volatile organic compound (SVOC) content of the paint. Unlike the VOC content, which can be calculated theoretically, the SVOC content shall be determined using the ISO 11890-2 method. For water-based paints (polar systems), any substance which elutes between diethyl adipate $(C_{10}H_{18}O_4)$ and methyl palmitate $(C_{17}H_{34}O_2)$ will be classified as an SVOC and will contribute to the proposed SVOC limits which are currently set at 30 g/L for white indoor paints and varnishes and 40 g/L for indoor tinted paints/outdoor paints and varnishes.

The new SVOC restrictions will not affect all paints currently available on the market (see Eastman publication M-EU596). Should you find, however, that the SVOC content of your formulation is above the newly imposed limits, or if you simply want to formulate paints for the future, then why not consider using a drop-in, non-(S)VOC product such as Optifilm enhancer 400.

As shown in Figure 1, Eastman Optifilm enhancer 400 will elute after methyl palmitate and thus will not be classified as an SVOC. Optifilm enhancer 400 can also be used in combination with Eastman Texanol™ ester alcohol to achieve an Ecolabel compliant formulation with optimum performance.

Figure 1. Gas chromatogram of Eastman Optifilm™ enhancer 400 using Ecolabel GC conditions





Zero emissions. Superior performance.

With Optifilm enhancer 400, you can now formulate low-emission, zero-VOC paint with great performance in any market.

Eastman Optifilm™ enhancer 400:

- Quick and easy drop-in replacement for conventional coalescents
- Eliminates extensive reformulation work often associated with switching polymers
- Near-zero emission
- · Zero VOC
- Is not classified as an SVOC in accordance with the new Ecolabel criteria
- Excellent film integrity, good touch-up properties, and wet scrub resistance
- · Ultra-low odour
- Formulation flexibility
- · Safe and easy to use

Not all new regulations¹ and labeling schemes take into consideration the "life cycle" aspects of coatings which include performance criteria such as coverage and service life. The durability of a coating is one of the key properties of a paint film. Formulating with Optifilm enhancer 400 will enable formulators to meet the increasing demand for durable paint solutions with lower odour and emissions.

When you choose Eastman as your supplier, there are no compromises. You will get high-performing product solutions that meet sustainability-driven trends for product safety and durability, and the reliability of an integrated global supply chain.

For more information, visit www.eastman.com/optifilm or contact your distributor for further discussion and product samples.

¹http://www.eurofins.com/product-testing-services/information/compliance-with-law/european-national-legislation/french-regulation-on-voc-emissions.aspx



The results of insight

Eastman Chemical Company Corporate Headquarters

P.O. Box 431 Kingsport, TN 37662-5280 U.S.A.

Telephone:

U.S.A. and Canada, 800-EASTMAN (800-327-8626) Other Locations, (1) 423-229-2000

Fax: (1) 423-229-1193

Eastman Chemical Latin America

9155 South Dadeland Blvd. Suite 1116 Miami, FL 33156 U.S.A.

Telephone: (1) 305-671-2800 Fax: (1) 305-671-2805

Eastman Chemical B.V.

Fascinatio Boulevard 602-614 2909 VA Capelle aan den IJssel The Netherlands

Telephone: (31) 10 2402 111 Fax: (31) 10 2402 100

Eastman (Shanghai) Chemical Commercial Company, Ltd.

Building C, No. 399 Shengxia Road, Pudong New District 201210, Shanghai, P.R. China

Telephone: (86) 21 6120-8700 Fax: (86) 21 5027-9229

Eastman Chemical Japan Ltd.

MetLife Aoyama Building 5F 2-11-16 Minami Aoyama Minato-ku, Tokyo 107-0062 Japan

Telephone: (81) 3-3475-9510 Fax: (81) 3-3475-9515

Eastman Chemical Asia Pacific Pte. Ltd.

9 North Buona Vista Drive #05-01 The Metropolis Tower 1 Singapore 138588

Telephone: (65) 6831-3100 Fax: (65) 6732-4930

www.eastman.com

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