

Eastman TXIB™ formulation additive as a diluent in MEK peroxide formulations

Many industrial formulations use MEKP (methyl ethyl ketone peroxide) to initiate cross-linking reactions for applications such as gel coats for boats. Often, MEKP is diluted with a suitable diluent or carrier. Dibutyl phthalate (DBP) and dimethyl phthalate (DMP) were traditionally used as diluents for MEKP. However, where a phthalate-free alternative is required, Eastman TXIB[™] formulation additive is frequently chosen as an effective diluent for MEKP. TXIB (2,2,4-trimethyl-1,3-pentanediol diisobutyrate) is a low viscosity (9 cps) diluent with a low freezing point that contributes to easier handling.

The production of MEKP is outlined in the following chemical reaction:

MEK peroxides

 $H_2O_2 + H_2SO_4 + MEK \longrightarrow MEKP + H_2O$

Advantages of using Eastman TXIB formulation additive in MEK peroxide formulations

Process advantages

- Low water solubility can be an advantage in waste water separation.
- Its low viscosity and low freezing point contribute to easier handling.

Performance advantages

- Produces low solution viscosity that aids application properties.
- Good compatibility with unsaturated polyester resins producing finished products with comparable gloss and color performance properties to other diluents.

To learn more about Eastman TXIB™ formulation additive as a diluent in MEK peroxide formulations, contact your Eastman representative today or visit www.EastmanPlasticizers.com.



The results of **insight**™

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