

# Efka<sup>®</sup> IO 6786

## General

Ionic liquid, conductivity promoter

Efka<sup>®</sup> IO 6786 is a highly active additive for a variety of physically drying and reactive coatings. It is used to adjust antistatic property of coatings and resistivity in liquid formulations to prevent from static charge or dust attraction during and after the drying process.

## Chemical nature

Non-functional, imidazolium salt

## Properties

### Physical form

clear yellowish to brown liquid

### Shelf life

Efka<sup>®</sup> IO 6786 should be stored at 10 – 30 °C in its originally sealed containers in a clean and dry environment. If the recommended storage conditions are observed EFKA<sup>®</sup> IO 6786 has a minimum remaining shelf life of 6 months from date of arrival at customers.

Efka<sup>®</sup> IO 6786 is hygroscopic. Therefore keep containers tightly closed and avoid handling at high humidity. If possible, exchange air in opened containers by dried air or nitrogen.

### Typical properties (Not specifications)

Purity, %	>97
Water content, %	<0.05
Viscosity, mPa.s	20
Melting point, °C	-21
Color (Gardner)	≤ 10

## Application

### Formulation

Efka<sup>®</sup> IO 6786 is designed for waterbased and solventbased formulations. It accepts incorporation together with other additives into the mill base or at the end of the production process.

For the production of antistatic coatings regular amounts of Efka<sup>®</sup> IO 6786 in clear coats and pigmented paints ranges from 1 – 5 %, in special cases up to 10 %, calculated on solid paint. Depending on pigments and dispersing agent antistatic additive content may vary because of the interaction with pigment surface; the same could happen with mineral matting agents.

Efka<sup>®</sup> IO 6786 is typically used as antistatic additive in thick layer 2K epoxy amine formulations. There it shows excellent electrical properties with the binder matrix.

Like other low molecular weight binders and plasticizers, the non-reactive Efka® IO 6786 can have a softening effect on the final coating.

### **Solubility / Compatibility**

Efka® IO 6786 can be formulated with polymer dispersions, polyester, epoxy and acrylate resins. Compatibility with alkyd resins and nitrocellulose is limited but good enough for adjustment of coatings resistivity. Many combinations result in turbid but stable emulsions. Because of numerous resins and resin combinations available in the market the formulator needs to carefully check compatibility and storage properties before use.

Efka® IO 6786 shows excellent acceptance in hydrophilic solvents and diluents like water, methanol, ethanol, Solvenon® PM, glycol ethers and glycol esters, acetone and propylene carbonate. They are not soluble in pure hydrocarbons, non-polar acetates, higher ketones and aromatic solvents.

### **Safety**

When handling this product please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

### **Note**

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

® = registered trademark, ™ = trademark of BASF Group, unless otherwise noted

BASF SE  
Formulation Additives  
67056 Ludwigshafen, Germany  
[www.dispersions-pigments.basf.com](http://www.dispersions-pigments.basf.com)  
[formulation-additives-asia@basf.com](mailto:formulation-additives-asia@basf.com)  
[formulation-additives-europe@basf.com](mailto:formulation-additives-europe@basf.com)  
[formulation-additives-nafta@basf.com](mailto:formulation-additives-nafta@basf.com)  
[formulation-additives-south-america@basf.com](mailto:formulation-additives-south-america@basf.com)