



**MILLIPORE  
SIGMA**

# Double your Benefit with MEGLUMINE

Applicable either as an advanced API  
intermediate or as a functional excipient

The life science business  
of Merck KGaA, Darmstadt,  
Germany operates as  
MilliporeSigma in the  
U.S. and Canada.

**SAFC®**

Pharma & Biopharma Raw  
Material Solutions

# WE'VE GOT YOU COVERED

Solubility and bioavailability of the API are key challenges for a formulator. To ensure a formulation's success and bring it to the market without delay, using the right grade and quality of materials is critical.

Meglumine is a versatile product applied either as a counterion to form a salt with the API or as a functional excipient. Traditionally applied as counterion in contrast media, meglumine can be also used to enhance API solubility, improve API stability, and adjust pH value. Applications include solid and liquid formulations, such as tablets, injectables, ophthalmics as well as topical dosage forms. Depending on your application, meglumine needs to meet different requirements.

Our state-of-the-art production site in Mollet del Vallès, Spain manufactures API-grade meglumine according to the latest regulatory guidelines, as advocated by the FDA and EMA. Furthermore, our meglumine is also available as an Emprove® Expert excipient.

We offer industry-leading support during the entire registration process and boast an excellent track record facilitating compliance with international standards. In addition, the quality, consistency and compliance of our raw materials is fully documented and supported by a secure and robust supply chain.

## Benefits

- Solubility and bioavailability enhancement of active pharmaceutical ingredients (API).
- Excellent counterion performance, a viable alternative to sodium.
- API grade manufactured under the cGMP ICH Q7 guideline for APIs.
- Sole manufacturing location for API-grade meglumine in Europe.
- Multi-compendial product, complying with all major pharmacopeias, including ChP.
- Meglumine Emprove® API has also been successfully co-reviewed in China.

## Product Profile

<b>Product name</b>	Meglumine low in endotoxins Emprove® API Ph Eur, JP, ChP, USP Meglumine Emprove® Expert Ph Eur, ChP, JP, USP
<b>Production process</b>	Multiple synthesis steps in dedicated equipment
<b>Regulatory status</b>	GMP, certified by Agencia Española de Medicamentos y Productos Sanitarios (AEMPS) for API grade; validated process (according to ICH Q7)
<b>Track record</b>	FDA audits; AEMPS audits
<b>Registrations</b>	US-DMF, CEP, Chinese Co-review
<b>Production site</b>	Mollet del Vallès, Spain

# Application range of Meglumine

## Advanced intermediate API

Meglumine-API salt with meglumine as counterion

$pK_a$  of Meglumine: 9.60

Suitable for APIs with a  $pK_a$  of 6 or lower

→ Meglumine is therefore part of the API

API-grade material is expected

## Functional excipient

pH modifier

Solubilizer

Alkalizer

Stabilizer

→ A complex with the active formed in the body

API or excipient grade acceptable

## API quality for advanced intermediates

According to the FDA, different salt forms of a drug substance are considered different APIs.

- Consequently, the counterion is considered part of the API.
- Therefore, both the API and the meglumine counterion should be manufactured according to ICH Q7.



For excipient applications, the same API-grade quality can be assured, with the additional excipient requirements provided in the Emprove® dossier, making Meglumine Emprove® Expert an ideal product for excipient applications.



# The Emprove® Program

## Your fast track through regulatory challenges.

Ensuring the compliance of your pharma and biopharma products involves the compilation of a vast amount of data, which can be time and resource intensive. Our Emprove® Program helps you meet the latest regulatory requirements for risk assessment and offers assistance in developing more robust processes.

To help you optimize your process, our Emprove® Program provides comprehensive and thorough documentation for approximately 400 raw and starting materials as well as a selection of filters, single-use

devices and components. It not only covers the latest regulatory requirements, but also anticipates industry expectations not yet covered by regulation. The Emprove® Program is organized into three different types of dossiers. Every dossier supports you throughout different stages of your operations: qualification, risk assessment, and optimization – so you can speed your way through the regulatory maze.

Find out more at:  
[SigmaAldrich.com/emprove](https://SigmaAldrich.com/emprove)

## Ordering Information

Cat. No.	Product	Pack Size	Packaging
<b>1.06143.1000</b>		1 kg	Plastic bottle in corrugated box
<b>1.06143.9025</b>		25 kg	PE bag in PE square drum*
<b>1.06143.9026</b>	Meglumine low in endotoxins Emprove® API Ph Eur, ChP, JP, USP	25 kg	PE bag in PE square drum*
<b>1.06143.9030</b>		25 kg	PE bag in plastic drum
<b>1.06143.9050</b>		50 kg	PE bag in plastic drum
<b>1.06187.1000</b>	Meglumine Emprove® Expert	1 kg	Plastic bottle in corrugated box
<b>1.06187.9029</b>	Ph Eur, ChP, JP, USP	25 kg	PE bag in PE square drum

\*CP3 pallets are used for article .9025, EURO pallets are used for article .9026

### Formulation Product Finder App

Find the right product for your application  
with our Formulation Product Finder App at:

[formulation-app.sigmaaldrich.com](https://formulation-app.sigmaaldrich.com)

The typical technical data above serve to generally characterize the product. These values are not meant as specifications and they do not have binding character. The product specification is available separately at: [SigmaAldrich.com](https://SigmaAldrich.com)

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For additional information, please visit [SigmaAldrich.com](https://SigmaAldrich.com)

To place an order or receive technical assistance, please visit [SigmaAldrich.com/contactAF](https://SigmaAldrich.com/contactAF)

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