

Making Levulinic Acid Happen



ounded in 2008, GFBiochemicals produces levulinic acid directly from biomass. With proprietary technology and a commercial-scale plant in Caserta, Italy, our levulinic acid is the platform chemical with significant potential to replace petroleum-based products in the chemical and biofuel sectors.

GFBiochemicals offers in-house application development.



Our production plant is the first of its kind. Now operating at 2,000 MT, we target capacity of 8,000 MT by 2017.

This innovative process delivers robust technology and feedstock flexibility with continuous production, ensuring reliable supply.

Samples are available now.

Contact Us To Discuss The Benefits For Your Business Marcel van Berkel Chief Commercial Officer GFBiochemicals Brightlands Chemelot Campus Burg. Lemmensstraat 358 6163JT Geleen The Netherlands





Levulinic acid (LA) is the platform chemical with significant potential to replace petroleumbased products.

GFBiochemicals has a breakthrough process for marketcompetitive, biobased levulinic acid. This enables levulinic acid derivatives for existing processes in both chemicals and biofuels.

Versatile applications are within reach.

CHEMICALS

Levulinic acid can be used in a comprehensive range of markets:

- Pharmaceuticals
- Agrochemicals
- Resins and Coatings
- Polymers and Plasticizers
- Solvents
- Flavors and Fragrances
- Personal care
- Food additives

BIOFUELS

Levulinic acid derivatives can be used to produce biodiesel and renewable jet fuel. Derivatives can also be used to produce fuel additives as well as gasoline components.

MARKET APPLICATIONS

Application advantages from levulinic acid derivatives include:

- Safer solvents with high solvent power in coatings
- Non-toxic plasticizers for flexible plastics
- Safer and concentrated detergents
- · Fuels with reduced emissions

VALUE-ADDED DERIVATIVES

Large family of derivatives include:

- Delta-amino levulinic
- Levulinate esters
- Gamma-valerolactone (GVL)
- Methyltetrahydrofuran
- Diphenolic acid



