



# Butamax™

A joint venture between BP and DuPont



## Biobutanol: Biofuels Transformed



Butamax is creating sustained value  
for refiners



## Benefits of biobutanol

**Biobutanol is the highest value biofuel option, when considering production cost and product value in the market:**

- Biobutanol is compatible with existing vehicles and refueling infrastructure at significantly higher levels than ethanol, overcoming the blendwall and providing a route to fully meet the renewable fuels standard.
- Biobutanol delivers 1.3 RINs per gallon and can be blended at 16vol% in gasoline. A 16% butanol blend generates the same number of RINs as would be generated by E20 while maintaining compatibility with vehicles and infrastructure designed for E10. Additionally, the 16% butanol blend offers motorists the same fuel economy as E10.
- Biobutanol can be produced as a conventional, advanced or cellulosic biofuel depending upon the feedstock (corn, sugarcane, lignocellulosics)
- Biobutanol is the only drop-in biofuel that can be readily manufactured at corn ethanol plants and offers the optimum combination of fuel value and production cost of all the biofuel options for these facilities.
- Biobutanol offers a high blending value due to its low RVP, high octane and favorable distillation properties.
- Biobutanol enables more light products to be refined from a barrel of crude oil, enhancing crude flexibility and refining margins.
- Biobutanol does not phase separate in the presence of water. Compared to ethanol, it is much less corrosive and a weaker solvent. These properties enable blending at refineries and transport by pipeline.

## Why Butamax is different

**Butamax is a fully resourced and committed partner, with technology developed specifically for the automotive fuels market:**

- **Fuels Market:** Unlike others, Butamax is focused on commercializing in the automotive fuels market, which represents the most material opportunity for growth and sustainable value.
- **Efficient production:** We believe that the fuels market will ultimately set the price of biobutanol, and the key to long term success is the most efficient process that can compete in the most competitive market.
- **Rigorous technology development:** Butamax has pursued a rigorous technology development program since 2003, covering all aspects of biobutanol production and use in the fuels market. Butamax has deep, broad and proven capability, and has invested heavily to develop the most attractive technology package.
- **Long term investors:** Butamax is funded by DuPont and BP, who are two of the strongest, most stable companies in the world, both of whom are deeply committed to the biofuels industry for the long term.

