



CONVERSION OF TRIACETIC ACID LACTONE TO POTASSIUM SORBATE

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The Invention

UW-Madison researchers have developed a new approach for producing the preservative potassium sorbate directly from the biomass-derived chemical intermediate triacetic lactone (TAL) rather than via sorbic acid as an intermediate. This reaction proceeds from TAL via simultaneous ring-opening and hydrolysis. The ring-opening step is base-catalyzed rather than acid-catalyzed as in earlier technologies, which enables simultaneous neutralization of the salt. The researchers have been able to obtain yields of up to 72% thus far. The potassium sorbate can then be purified using THF extraction. Potassium sorbate made via this method has been verified to be effective against bacteria/yeast and can be used as a preservative in the food and pharmaceutical industries.

Additional Information

For More Information About the Inventors

- [George Huber](#)

Tech Fields

- [Clean Technology : Biobased & renewable chemicals & fuels](#)

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854