

Biosuccinium®

Biosuccinium is a 100% bio-based succinic acid that produces more sustainable materials and products



Succinic acid is a precursor, as a replacement of maleic anhydride (MAN), for the production of Butanediol (BDO) which is used as a solvent or in various polymer applications. It can also be used for biopolymer production, for chemicals such as polybutylene succinate (PBS).

Succinic acid is not only used as basis of certain biodegradable polymers but also as component of some specific resins. It has applications in the food, dietary supplement and pharma industries.

Biosuccinium is renewable and provides an improved environmental footprint.

Biosuccinium (BioSAc) is not only renewable but also provides a more favorable environmental footprint compared to fossil fuel-based chemicals. These sustainability aspects are important to downstream customers who face environmental regulations and increasing consumer demand for more sustainable products. Examples include:

POLYURETHANES



Running shoes



Wood & furniture coatings



Automotive textiles

POLYBUTYLENE SUCCINATE (PBS)



Plastic utensils

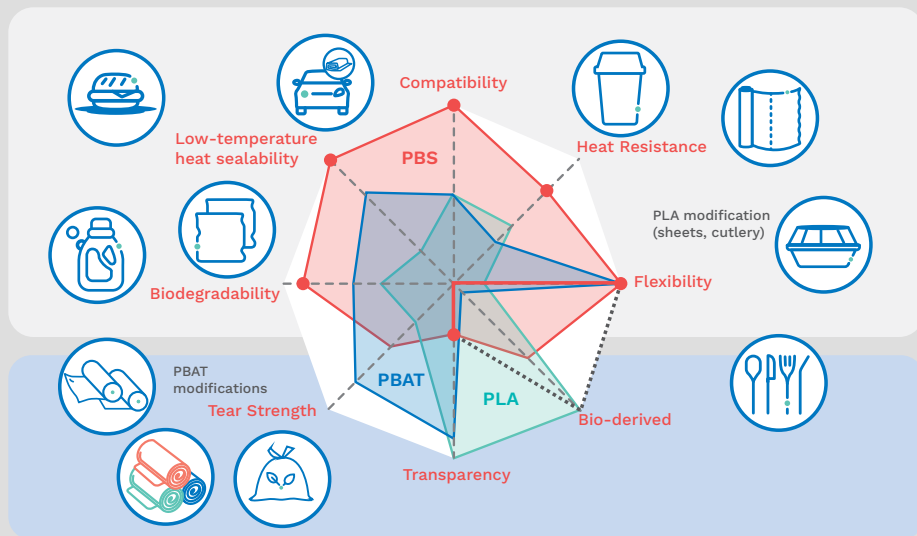


Food packing (film)



Plastic cups

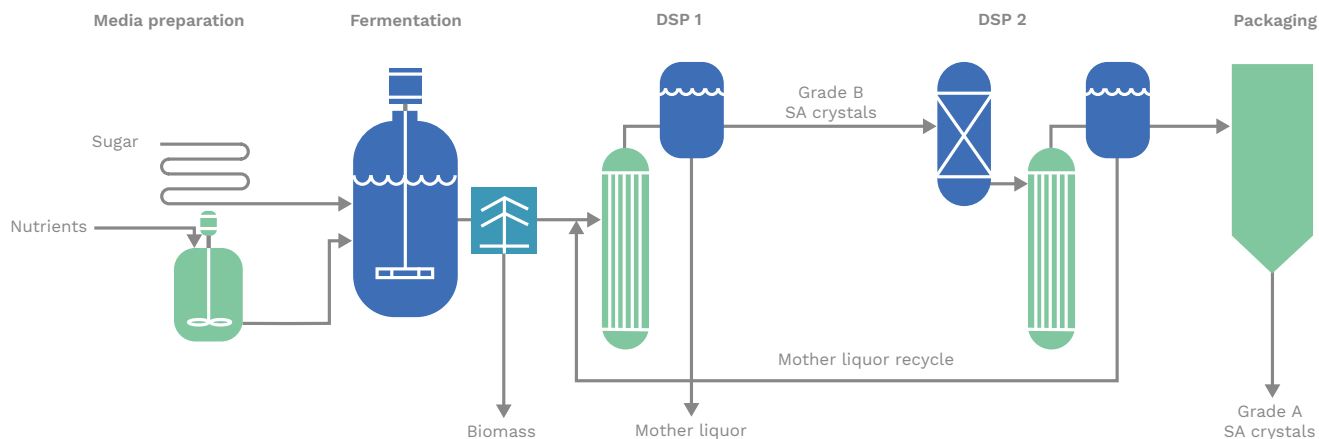
PBS is a new polyester of choice, with better properties than competing bio polyesters.



The process

BioSAc is obtained by fermenting sugar feedstock, obtained from wheat, corn, sugar beet or sugar cane, with a proprietary strain of GMO yeast. Polymer grade ('grade A') succinic acid is produced as crystals, with two trains of downstream processing, applying classic bio-process unit operations such as ion exchange, evaporation and crystallization.

Technip Energies offers licenses for our proprietary Biosuccinium technology, including strains supply, and full engineering, procurement services, and construction management (EPsCM) services.



References

- Roquette 10 kta plant in Italy
- Confidential 30 kta plant in Canada