

# Can green seaweed provide a new bio-based route for the production of acrylic acid in the context of biorefineries?

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## Summary

Acrylic acid (AA) is a platform chemical used to produce esters polymerized for applications in paper treatment, plastic additives, textiles, sealants, adhesives and surface coatings, and is an important starting material for superabsorbent polymers, which are widely used in diapers and other hygiene products.

### Aims

- Develop a sustainable process for the production of acrylic acid
- Identify the best scenario to improve extraction and recovery of acrylic acid from green seaweed
- Reduce reliance on current petrochemicals production

### Outcomes

- Proved the possibility of extracting DMSP and AA from green seaweed feedstock using different combinations of enzymatic treatments
- Increased potential to generate additional income in the valorisation chain of this feedstock

