



BESE-elements®

Biodegradable elements for starting ecosystems

SIZE AND WEIGHT	922 x 455 x 20 mm, 0.44 KG/sheet
AREA/VOLUME ; DENSITY	80 m ² /m ³ ; 1,3 g/cm ³
CERTIFICATION	The biopolymer Solanyl is certified as EN13432 (industrial composting) and certified according TÜV AUSTRIA OK compost.
BIODEGRADABILITY	Biodegradability depends on environmental conditions. Estimates Type 1: biodegradation in 10 to 20 years ¹ ; Type 2: biodegradation in 2 to 4 years.

Characteristics

Stackable 3D matrix made of potato waste and derived starch biopolymer. Single sheet elements clicked together to form a porous membrane structure or lattice. BESE-elements® provide functions as establishment structure and help with reduction of local currents and waves, stability, shelter and protection from predators.

Function and application

BESE-elements® are also used to aid the recovery of oyster reefs, saltmarshes, seagrass meadows, riparian vegetation, reed beds, peat mosses, submerged aquatic vegetation, fish habitat, mangroves, corals and mussel beds. Other applications include erosion control, natural filter systems and floating green islands.

Scientific evidence

BESE-elements® are investigated by scientists around the globe. A strong knowledge base is one of the main features of our products. We are proud to collaborate with an inspiring group of senior researchers in different fields of restoration ecology a.o. Royal NIOZ, University of Florida, University of the Sunshine Coast and Macquarie University.

Scientific evidence BESE-elements

- Biodegradation in vitro & situ
- Saltmarsh establishment, growth: transplants and seeds
- Oyster reef establishment and growth
- Seagrass establishment and growth: transplants
- Peat moss establishment and growth: transplants
- Biodegradable artificial reef
- Fish habitat
- Wave and current reduction
- Stabilisation
- Trait based restoration, mimicry

Publications



¹ Nitsch et al. 2021 <https://doi.org/10.3390/su13137415>

