

BIQ400

Biobased Performance Infill for Artificial Turf

BIQ400 is a biobased performance infill for artificial turf systems. It is designed to deliver consistently high sports performance while significantly reducing environmental impact compared to conventional fossil-based infills.

The product is made from biodegradable, renewable, non-toxic raw materials and is fully recyclable, supporting circular material use in sports infrastructure.

Background and current status

BIQ400 is currently in production and scheduled for delivery to three football pitches in Norway in the near term. Once installed, the product will be evaluated as part of the Grønt gress 2031 Innovation Project to assess sports performance, player safety, durability, and environmental behaviour over time, in both indoor and outdoor field applications.

Laboratory testing has already been completed, and the infill has supported and achieved FIFA Quality Pro certification when installed in artificial turf systems supplied by Saltex and Limonta.

Key properties

- Performance and User Experience
 - When installed in artificial turf systems supplied by approved turf manufacturers, the infill supports compliance with FIFA Quality and FIFA Quality Pro performance requirements, subject to system-specific testing.
 - The infill demonstrates stable playing characteristics within applicable FIFA test parameters, contributing to consistent ball and player interaction.
- Health and Safety
 - The material is non-toxic and contains no intentionally added hazardous substances, in accordance with applicable chemical regulations.
 - The infill exhibits a stable particle structure with limited generation and migration of dust and fine particles.
 - The material is soft and flexible, contributing to effective shock absorption and player comfort when tested as part of a complete turf system.

- Climatic and Seasonal Performance
 - o The infill is suitable for use under varying climatic conditions, including year-round operation.
 - o The material is non-water absorbing and does not freeze under low-temperature test conditions.
- Environmental Characteristics
 - o The infill is manufactured from biobased, biodegradable, and recyclable raw materials.
 - o The material supports circular material use, subject to local recycling and waste-handling infrastructure.

Prerequisites and Use Recommendations

BIQ400 is intended for use in modern artificial turf systems and shall be installed in accordance with the recommended infill depth and applicable standard maintenance procedures. Compatibility with the selected turf system shall be verified prior to installation.

The infill is suitable for football and multi-sport fields where requirements related to sustainability, player safety, and long-term performance are prioritised.

Ongoing and planned testing in additional climate zones is intended to support the development of comparative performance data under varying environmental conditions.