

Effect Pigments for Seed Coating

Why seed companies and formulators work with ChemTech · September 2026

Chemical Technologies SIA (ChemTech) is a European developer, manufacturer and supplier of effect pigments, based in Riga, Latvia, and operating since 2012. Our management systems are certified to ISO 9001:2015 and ISO 14001:2015. For the seed sector we supply pearlescent pigments engineered around one principle: identification, not decoration.

Why now: the microplastic transition

Regulation (EU) 2023/2055 requires seed coatings to be free of synthetic polymer microparticles — by October 2028 for coatings without plant protection products and October 2031 for treated seeds. The industry is reformulating. Our micabased pigments are inorganic and outside the microplastic definition by design: adopting them carries no reformulation risk and no transitional dependency. A signed Statement on the Absence of Microplastics (CT-REG-001) covers all 18 CTA grades.

What we supply

- **CTA Series (18 grades)** — synthetic-mica pearlescents: guaranteed heavy-metal limits (accredited ICP-MS verification completing Q4 2026), batch-to-batch consistency for your registration dossier, and zero natural-mica sourcing risk for your ESG audit.
- **Fine pearlescent grades (5–30 µm)** — five grades for film coating of high-value vegetable and field seeds: low dosage, clean anchoring in the film former, strong furrow visibility.
- **Gold and copper shades** — for signature finishes on branded hybrids, colour-matched to your brand book.
- **SC Grade (launching 2026)** — a dedicated seed-coating form: dust-suppressed, biocide-free, with water activity declared per batch.

What the pigment does for you

- **Brand identification** — a signature pearlescent finish your growers recognise in the bag and in the furrow.
- **Anti-counterfeiting** — three layers of protection: a visible effect that is hard to imitate, a hidden inorganic UV marker readable with a hand lamp, and a spectral fingerprint per batch.
- **Process compatibility** — consistent, characterisable reflectance for optical sorting and precision-seeding cameras; reflectance data available during trials.
- **Portfolio differentiation** — distinct effect shades to code product lines where the matte colour palette is exhausted.

Documentation first

Supplier qualification in the seed sector is decided on paper before it is decided in the lab. We structure our documentation the way your qualification checklist reads it. Available today: the signed Statement on the Composition of Raw Materials (CT-REG-010, v2.0) and Statement on the Absence of Microplastics (CT-REG-001); guaranteed heavy-metal limits on request, with the formal Statement (CT-REG-022) issued on completion of accredited ICP-MS verification in Q4 2026. Dustiness data per DIN 55992-1, comparative Heubach dust-off data in a model coating and ISTA germination data are in progress with target dates published in our Statement on Regulatory Documentation (CT-REG-011) — so your regulatory team can plan the qualification timeline from day one.

How we work

- Samples within 48 hours from Riga stock; laboratory samples from 100 g, pilot lots from single-bag quantities.
- Screening support in your binder system; technical specialists respond within one business day.
- Colour matching to your brand book within days, not months.
- Shade exclusivity available within your crop segment; private-label supply available for formulators.

The economics

Pearlescent pigments look expensive per kilogram and cost cents per seeding unit — at 1–3% of the coating, a few hundredths of a percent of a premium seed unit price. We will run your specific numbers during the first technical call.

Next step

A 15-minute technical call to select 3–5 grades for a screening trial in your coating system — with samples on your bench the same week.

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DISCLAIMER: This information is based on our best knowledge at the time of publication and the regulations currently in force. The suitability of the product for a particular application, and compliance of the final coating formulation, remain the responsibility of the manufacturer of the final product. Full disclaimers: see the referenced Statements.