CHEMICAL ADDITIVES
in Molded Fiber Products

OVERVIEW OF MOLDED FIBER TYPES AND CHEMICAL ADDITIVES

Molded fiber products are manufactured in different types, each with specific applications and chemical additive needs. Chemicals are essential to improve drainage, strength, hydrophobicity, microbial resistance, and barrier properties such as WVTR and OGR.

MOLDED FIBER PRODUCT TYPES

TYPE	DESCRIPTION	COMMON APPLICATIONS
Type 1	Thick-wall	Industrial packaging, heavy consumer items
Type 2	Transfer molded (rough finish)	Egg cartons, light consumer items
Type 3	Thermoformed (thin-wall)	Electronics packaging, high-end retail trays
Type 4	Processed/microformed	Cosmetic inserts, medical device packaging, printed inserts

COMMONLY USED CHEMICALS (TYPE 1 & TYPE 2)

- **Deaerators/Defoamers:** Increases production and quality
- **Strength Aids (Starch and Non-Starch):** Strength improvement/quality improvement.
- **Waxes, and AKD/ASA/Rosin Size (For Multiple Hydrophobicity Levels):** Improves quality parameters.
- **Promotors/Coagulants/Anionic Trash Catchers:** All different names for chemicals to clean up the system from organic anionic trash
- **Offline Cleaning Agents:** To achieve deep cleaning of the machines during stops
- **Drainage Aids:** Increase production
- **Biocides:** Lower microbiological counts and maintain quality.
- **Retention Aids:** Cleaning White water and improve quality.
- **Release Agents:** To help the products release smoother from the molds
- **Anti Scaling:** To prevent scale build up on heat exchangers and vacuum systems

Type 3 & Type 4:
All the above, plus WVTR and OGR as barrier coatings for oil and grease. For long-term water vapor and oxygen, wet end chemistry requires an additional externally applied layer.