

# ANTI-SLIP ADDITIVES FOR RESINOUS COATINGS

## OVERVIEW

Anti-slip additives enhance traction and safety on resinous flooring systems without compromising chemical resistance or coating integrity. Selection of additive type, particle size, and loading rate depends on traffic type, environmental conditions, and desired slip resistance. Polypropylene (PP) and Aluminum Oxide (AO) are the most commonly used aggregates.

### Additive Types & Characteristics

Polypropylene (PP); Lightweight, inert, chemically resistant; Light to medium traffic areas; decorative floors

Aluminum Oxide (AO); Hard, durable, abrasive; High-traffic or industrial areas requiring maximum traction

### Recommended Mix Rates & Grit Sizes

Additive Grit Size Mix Rate (% by weight of topcoat) Application Notes

Polypropylene 16–30 mesh 2–4% Light slip resistance, easy to broadcast, minimal effect on appearance

Polypropylene 8–16 mesh 4–6% Medium slip resistance, suitable for wet or moderate industrial areas

Aluminum Oxide 20–40 mesh 1–2% Medium slip resistance, industrial environments

Aluminum Oxide 8–20 mesh 2–4% High slip resistance, heavy-duty or chemical-exposed floors

Aluminum Oxide 6–12 mesh 4–6% Maximum slip resistance for extreme traction requirements

Note: Adjust loading rates based on floor traffic, environmental exposure, and desired aesthetic. Overloading can affect coating flow, appearance, and gloss.

### Application Guidelines

- Broadcast Method:
  - Sprinkle aggregate onto wet topcoat or buildcoat immediately after application.
  - Avoid clumping; aim for even distribution.
  - Remove excess granules after cure if necessary.
- Premix Method:
  - Blend additive into coating at recommended percentage.
  - Apply using roller, squeegee, or trowel.
  - Ensure uniform suspension to prevent settlement.

### Best Practices

- Pre-test small areas to ensure desired slip resistance and visual appearance.
- Avoid applying anti-slip additives to areas where smooth, glossy finish is critical.
- Document type, grit size, and mix rate used for QA and maintenance reference.