EPOXY ACCELERATOR: USE, BENEFITS & BEST PRACTICES

OVERVIEW

Epoxy accelerators are additives formulated to reduce cure time and increase reaction speed of epoxy coatings. They are particularly useful in cold or low-temperature environments, or when rapid return-to-service is required. Proper use enhances productivity while maintaining coating performance, but incorrect application can lead to defects or reduced shelf life.

Key Benefits

- Faster Cure: Reduces pot life and accelerates hardening at low temperatures.
- Improved Production Efficiency: Allows quicker installation and early return to service.
- Enhanced Low-Temperature Performance: Enables epoxy to cure under marginal conditions without sacrificing adhesion or chemical resistance.
- Controlled Viscosity: Maintains workability while speeding reaction.

Recommended Applications

- Cold-weather epoxy installation (<50°F / 16°C).
- Fast-track flooring in industrial or commercial settings.
- Situations requiring reduced downtime for traffic or chemical exposure.

Application Guidelines

1. Substrate Preparation: Ensure surface is clean, dry, and properly prepared.
2. Mixing: Add accelerator to mixed material; follow manufacturer's recommended mix rate.
3. Pot Life: Expect reduced working time; mix only quantities that can be applied within the shortened pot life.
4. Application: Apply epoxy as usual with roller, squeegee, or trowel. Maintain proper film thickness.
5. Curing: Accelerator enables faster cure; monitor surface temperature and environmental conditions

Precautions

- Do not exceed recommended dosage—over-accelerating can cause rapid gelling, uneven cure, or poor adhesion.
- Maintain proper environmental conditions (temperature, humidity, airflow) even with accelerator use.
- Use PPE and follow standard epoxy handling procedures.

Best Practices

- Conduct small-scale trial mixes to determine ideal dosage for project conditions.
- Document accelerator use, batch numbers, and applied areas for quality control.
- Store accelerator separately, in tightly sealed containers, within recommended temperature ranges.