Epoxy Flooring Systems
Safe Handling Practices

FLOOR PREPARATION
It is essential that the floor be properly prepared in order to ensure that the epoxy material adheres to the surface. This can be accomplished by either abrasive or wet chemical methods.

SAFETY AND HEALTH CONCERNS:
- Exposure to dusts, acid and alkaline mists, and/or organic solvents
- Flammability of solvents

PROTECTIVE MEASURES:
- Use adequate ventilation
- Use respirators
- Wear protective clothing and rubber gloves
- Wear protective eyewear

FLOOR PRIMING
Epoxy primers are typically low-viscosity binder systems that penetrate concrete to form a sealer coat. They are applied by squeegees, roller, or spray. Primers contain epoxy resin, reactive diluents, solvents, and curing agents.

SAFETY AND HEALTH CONCERNS:
- Exposure to epoxy materials during component blending and application
- Skin exposure by direct contact with priming components
- Inhalation exposure by breathing diluent, solvent, or curing agent vapors
- Flammable or combustible epoxy system components

PROTECTIVE MEASURES:
- Use adequate ventilation
- Use respirators
- Wear disposable coveralls, rubber gloves, and boots
- Wear protective eyewear

BLENDING
Flooring systems are generally shipped as 3-component blends (the resin, curing agent, and aggregate). Blending is conducted at the time of application due to the limited pot-life of the product. Component blending can range from hand mixing in a 5-gallon pail to power mixing in an epoxy mixer for larger applications.

SAFETY AND HEALTH CONCERNS:
- Exposure to dusts, acid and alkaline mists, and/or organic solvents
- Flammability of solvents

PROTECTIVE MEASURES:
- Use adequate ventilation
- Wear disposable coveralls, rubber gloves, and boots
- Wear the appropriate respiratory protection
- Wear organic vapor respirators if using systems with volatile components
- Wear protective eyewear
- Use respirators

APPLICATION
Once the flooring system has been blended, it is transported by bucket or cart for application. Certain seI4eveling formulations are pumped and transferred by hose.

SAFETY AND HEALTH CONCERNS:
- Exposure to dusts, acid and alkaline mists, and/or organic solvents
- Flammability of solvents

PROTECTIVE MEASURES:
- Use adequate ventilation
- Wear disposable coveralls, rubber gloves, and boots
- Wear organic vapor or air-supplied respirators if using systems with volatile components
- Wear protective eyewear

FINISHING
Self-leveling systems are spread with rollers or squeegees. Trowelable systems are frequently spread with a hand trowel or for larger applications, with a screed box. Trowelable systems are often finished to a smooth surface with a power trowel.

SAFETY AND HEALTH CONCERNS:
- Exposure to dusts, acid and alkaline mists, and/or organic solvents
- Flammability of solvents

PROTECTIVE MEASURES:
- Use adequate ventilation
- Wear disposable coveralls, rubber gloves, and boots
- Wear organic vapor or air-supplied respirators if using systems with volatile components
- Wear protective eyewear

CLEANUP
When the job is complete, tools and equipment must be cleaned. Epoxy must also be removed from worker’s skin.

SAFETY AND HEALTH CONCERNS:
- Inhalation of solvents while cleaning equipment
- Skin exposure to epoxy materials
- Skin exposure to solvents - use solvents to clean equipment - NOT SKIN!
- Exposure from contaminated clothing
- Eating, drinking, or smoking without cleanup of hands and face
- Flammability of solvents

PROTECTIVE MEASURES:
- Use adequate ventilation
- Wear the appropriate protective clothing and respiratory equipment while cleaning with solvents
- Wear protective eyewear
- Remove protective equipment before entering lunch or break rooms
- Replace contaminated clothing at breaks
- Clean and/or dispose of contaminated clothing properly
- Use industrial skin cleaners to remove epoxy from the skin
- Practice good personal hygiene throughout the day followed by a shower at the end of the work shift

Remember: Always read the MSDS before using a chemical.