

# Alliance Specialty Products

High Performance Polymers

## Concrete Preparation Bulletin

### Introduction

The success of any epoxy flooring system depends on the care taken in surface preparation. The most valuable time on the job is time spent preparing the slab. Short cuts may sound good in the beginning, but they may cause major problems in the future. Take a few moments to read this bulletin, and if you have any questions, please contact our office for assistance.

There are two major categories of concrete preparation: wet/chemical and dry.

### Wet/Chemical

Concrete should be 21-28 days old and free of oil, grease, wax, sealer, or any other surface contamination.

Acid etching is a proven method of concrete surface preparation. There are many manufactured brands and blends of acids and soaps that may be used successfully. Follow the instructions closely when mixing and applying the etch solution. The key to good acid etching is the neutralizer step and the rinsing phase. Some acids may advertise a "self-neutralizing" feature, but our suggestion would be to use test strips before relying on this feature.

**NOTE: You must follow codes and regulations with regard to disposal of the used etch solution.**

A second, but not small, caution is **safety**. The proper use of acid solutions is a must. An acid spill can be dangerous and costly. Wear proper protection. Review the area to be cleaned for proper ventilation, drainage, and for surfaces other than concrete which may be damaged by a splash or even by the acid fumes.

**Example:** Metal surfaces, door frames, machine parts, cooler walls, vents, ducts, painted surfaces which may discolor, adjoining work areas which may be affected by drifting fumes.

### **Make your own list of precautions.**

For the removal of curing agents, sealers, or coatings, get the name of the material in question and contact their representative for a sound removal solution. Use of acids, solvents, and strippers is not to be taken lightly.

Wear protective clothing, respirators, goggles, boots, and gloves. Pretest a small area to insure your success before starting the complete job. Use care when handling strippers and solvents. These materials are highly flammable. Dispose of used cleaning material at a properly designated location.

The best solution to the sealer problem in new construction is to contact everyone connected with the job in advance and advise them in writing that no cure or seal should be used. If they insist, then include the cost of removal in your letter of warning.

### Dry

**Steel shot blasting** is the best, fastest, and most acceptable method of cleaning. This service can be subcontracted or you may lease or purchase a shot blaster. We will not suggest a brand name, but be sure of good service and proper maintenance.

**Scarifiers** will remove surface dirt, grease, and contaminants. They may be too loud, slow, or dusty for your situation. Dust collectors are available. Carbide teeth and a variety of other cutting tools will add to the effective use of your scarifier.

**Scabblers** are a tried and sure method of preparation. They are slow and dusty but allow the use of plant air systems rather than gasoline or electricity. Care should be taken that too much concrete is not removed. This is difficult to gauge with a scabblers.

**Grinding** using diamond, carbide, steel, or stones can be slow and messy, as water creates a muddy residue. This method tends to polish or smooth the surface rather than abrade the concrete and is the least recommended method of preparation.

**On new concrete**, we suggest notifying the contractor in writing to provide an unsealed broom finish on the concrete. A medium to rough finish will allow for the best possible bond and require the least preparation time.

**The best epoxy material requires the best concrete preparation and is a low-cost investment in increasing the customer's satisfaction.**