

# TK AS-1™ PRODUCT DATA SHEET



## DESCRIPTION

Achro Seal 1 (AS-1) is a commercial grade, non-yellowing, cure and seal that meets ASTM 1315 and 309 standards. AS-1 is a 25% solid, clear, penetrating, high-quality acrylic/methyl methacrylate resin used to properly cure and protect industrial, commercial, retail, and multi-family housing concrete surfaces. These surfaces include new and existing parking garages, parking lots, walkways, drives, and food processing plants.

### USES:

AS-1 is suitable for interior or exterior use on new and existing surfaces:

- Concrete and cementitious surfaces
- Cement based terrazzo
- Brick and stone
- Architectural concrete
- Industrial
- Commercial
- Residential
- Meat and poultry processing plants
- Food processing plants
- Warehousing and storage
- Parking lots and garages
- High traffic walkways
- Residential patios, driveways, walkways, and basement floors

### BENEFITS:

- Meets the VOC Regulatory Compliance for AIM
- Superior penetration and adhesion
- Maximum resistance to dusting, abrasion, and damage
- Color enhancing properties

## APPLICATION PROCEDURES

### PREPARATION:

Surfaces must be clean, dry, and free of oil, grease, soil, efflorescence, dust or laitance. Power washing of the surface is advised and any repairs must be made prior to application. Once the surface has been cleaned, it must be dried, and any rinse water should be removed by flushing down a drain (if permitted) or with a vacuum. A simple test to ensure proper dryness is to place a rubber mat on the floor overnight. If no visible moisture or darkening of the mat is observed, then the surface is dry enough to coat.

At this point, a small mock-up area should be applied in an inconspicuous location to test the compatibility of the coating with the prepared substrate. Allow the coating to dry and cure fully, then inspect for proper film formation, gloss, and adhesion. Confirm that the film is free from whitening or any other defects.

### MIXING:

The material is ready for use and requires no mixing or dilution. It is unlawful to further dilute with non-exempt solvent.

### APPLICATION:

AS-1 WILL DARKEN CONCRETE.

### NEW CONCRETE APPLICATION:

Finish trowel and allow surface water to completely dissipate. Use a low pressure (20-30 pounds)



sprayer or power sprayer and apply uniformly at the specified rate of coverage (below). Avoid heavy accumulation.

### EXISTING CONCRETE APPLICATION:

Use a long nap applicator or a paint roller to distribute the compound more evenly. Back rolling is highly recommended. Avoid heavy accumulation. An airless sprayer or low pressure spray equipment may be used on larger application areas. Apply a second coat to surfaces that are very porous and where absorption is rapid. Allow the coating to become tack free between coats.

## CLEAN UP

Use TK-00 XYLENE\* to clean tools and equipment. Pump solvent through the sprayer to remove residue of materials which can clog the hose and wand assembly.

## COVERAGE

Surface	Coverage
Curing	300-500 square feet per gallon
Dustproof/Seal:	300-500 square feet per gallon
Dustproof/Seal, Second Coat:	400-800 square feet per gallon
Dustproof/Seal, Renovation:	300-400 square feet per gallon

Coverage rates are provided as a guideline only. Many factors, including surface texture, porosity, and weather conditions, will determine actual coverage rates.

## MAINTENANCE

Minimal maintenance is required, other than occasional sweeping, dusting, or mopping. If wear patterns do occur or if spillage removes the coating, AS-1 may be reapplied to the affected area(s).

## LIMITATIONS

- Apply in temperatures above 40°F. Colder weather applications may be made under prescribed conditions and procedures specified by TK Products.
- Not for use on asphalt or surfaces subjected to immersion or constant liquid contact.
- Not for use where spillage of solvents, fuels, brake, transmission, or hydraulic fluids, etc. are expected.
- Sprayers must be equipped with neoprene hose, washers, and gaskets as rubber or other materials will disintegrate from the solvent.
- Apply this product according to recommended coverage rates. Over-application may cause discoloration.
- Material will not freeze and may be stored outdoors in cold weather; however, it must be allowed to warm to approximately 50°F before use.

**Note 1.** Concrete containing calcium chloride will remain dark longer when sealed. Extenders and additives (concrete admixes, fly ash) are now being added to some ready mixed concrete, which can cause inconsistency in the porosity of the concrete. Some areas of the finished concrete may then appear darker than others. To compensate for these variations, coverage ratios should be adjusted.

**Note 2.** Pop out problems can occur anytime. However, concrete in certain regional areas, concrete applied in extremely hot conditions (90°F+), and heavily steel-troweled concrete can aggravate pop out problems. These deficiencies are the result of a heat-caused reaction, called Alkali Silica Reactivity (ASR), between the silica in the shale particles of the fine aggregate with the sodium and potassium alkali in the Portland cement. For more information on this problem, refer to "POPOUTS" by Norman 11/17 Last Rev. 10/15 E. Henning, P.E. and Kenneth L. Johnson, P.E. of Twin City Testing and Engineering Laboratory and Lowery J. Smith of the J.L. Shiely Company. Where this type of shale is present and extremely hot weather conditions prevail, it is recommended that liquid membrane curing compounds should not be used until the concrete has been completely cured by water ponding, continuous water spray mist, or wet burlap covering for a period of three days. A seal coat can then be applied.

## FIRST AID

Consult this product's Safety Data Sheet for additional health and safety information. Safety Data Sheets are available through TK distributors, the TK office, and the TK website.

## NOTES

\*T-K-00 XYLENE must be purchased separately

## REVISIONS

LAST: 11/17

PREVIOUS: 10/15

## TECHNICAL DATA INFORMATION

Surface	Coverage
<b>Composition and Materials:</b>	A clear, methacrylate/acrylic copolymer resin blended with fast-drying aromatic hydrocarbon.
<b>Percent Solid:</b>	25%
<b>Flash Point:</b>	> 100°F
<b>Moisture Efficiency:</b>	.18 kg/m <sup>2</sup> @ 300 ft <sup>2</sup> /gallon (max allowed .40 kg/m <sup>2</sup> per ASTM C-1315)
<b>Drying Time:</b>	Tack free: 1 hour Open to Traffic: 2 hours
<b>VOC Content:</b>	< 700 g/l
<b>A.I.M. Category:</b>	Curing and Sealing Compound
<b>Maximum VOC:</b>	700 g/l
<b>Applicable Standards:</b>	- ASTM C-1315, Type 1, Class A, B & C - ASTM C-309, Type 1, Class A & B and Type 1D with a red dye added - Fed. TTC-C-800A, Type 1, Class 1 - AASHTO Des. M-148., Type 1, Clear - USDA Authorization for use in meat, poultry, and food processing plants. - Resilient Tile Institute approval for compatibility with most resilient tile, carpet adhesives, and paints.

## MANUFACTURER PART #'S

Size	Item Code
55 GALLON	TK-AS-1 1315 55 CL
5 GALLON	TK-AS-1 1315 5 L PHEN PS
1 GALLON	TK-AS-1 1315 G. F