

TD.455 – TECHNICAL DATA: AUS-V™ Aliphatic Urethane Coating

Revised: 11/7/2023 Version: 1.9

Product Class: Clear polyurethane protective coating.

Description: AUS-V™ Aliphatic Urethane is a waterborne, 75% solids, high performance, two component, protective coating that provides exceptional properties for abrasion resistance, chemical resistance, and UV stability. Available in gloss and satin/matte (with optional Satin AGG additive). AUS-V™ was engineered to meet all VOC compliance requirements nationwide and internationally.

Typical Uses:

- Protective top coat for REFLECTOR™ and HERMETIC™ flooring systems.
- General protection of interior concrete floors.
- As a clear protective topcoat for interior cementitious overlays.
- Commercial flooring: retail, medical, showrooms, food preparation areas, educational, clean rooms, etc.
- Industrial flooring: warehouses, auto service centers, aircraft hangars, manufacturing facilities, loading docks, etc.

Key Features:

- Satin or matte finish with addition of Satin AGG, resulting in greatly increased abrasion resistance.
- Safe to use indoors. No odor and non-flammable
- Optional specialty liquid pigment can be added in the field, resulting in a UV stable flooring system.
- AUS-V™ complies with all applicable air quality management regulations including those restricting VOC content to less than 25 g/L.
- USDA, FDA, and CFIA compliant

Product Properties: (Material and curing conditions at 77° F / 25° C unless noted, 50% R.H.)

- Color: Applies as milky white (dries clear)
- Viscosity @ 77° F / 25° C, 50% R.H.
 - Part A: 50 cps
 - Part B: 600 cps
 - Mixed: 80 cps
- Pot life: 30 minutes
- Light foot traffic: 24 hours
- All traffic (full cure): 72 hours
- Gloss, satin, or matte finish

Physical Properties

(@77° F / 25° C, 50% R.H. 7-day ambient cure)

Solids by volume	75%
Recommended film thickness	2 to 4 mils (wet)
Abrasion resistance CS-17 Wheel, 1 kg load @ 500 cycles	16 mg loss
Impact resistance	Gardner Impact, Direct = 150 in. lb. (passed)
Flexibility	No crack or defects on 1/8" mandrel
Adhesion (applied to E100-PT1™, E100-VR1™, E100-UV1™)	450 psi @ Elcometer (concrete failure)
Volatile organic content	25 g/l
Reaction to fire – standard EN 13501-1:2018	C _{FL} -s1

*Refer to TD.401 for chemical resistance chart.

****Any dyes or stains that may come in contact with AUS-V™ must be tested before application. Results will vary.**

Limitations:

- Not for use on exterior concrete.
- Requires a working vapor barrier in some instances to protect from vapor emission or moisture concerns.
- Not for surfaces subject to continuous water submersion.
- DO NOT ALLOW TO FREEZE BEFORE USE.

Coverage:

- Coverage of 300 to 500 sq. ft. per gallon / 27.87 to 46.46 sq. meters per 4 L (application varies)
- As a gloss, thicker build, decreased "egg shell" finish: 300 to 350 sq. feet / 27.87 to 32.52 sq. meters
- As an "egg shell", satin, or matte finish on smooth epoxy coatings: 400 to 450 sq. feet / 37.16 to 41.81 sq. meters.

Available Packaging:

- 1.5, 3, and 15-gallon kits.

Application:

- AUS-V™ must be properly mixed prior to application. Failure to do so may result in uneven curing and create discoloration throughout the finish which may result in product failure.
- Apply a thin and even coat while maintaining a wet edge and monitoring the desired coverage rate. Do not allow to puddle or collect in joints or impressions.
- If Satin AGG is added, agitate often each time additional material is needed.
- AUS-V™ should be applied on a dry day when the surface and ambient temperatures are between 40° to 90° F / 4.4° to 32.2° C. The surface to be coated must be dry and free of moisture, debris, dust, oil, etc. that will interfere with bonding and cure. Do not apply AUS-V™ on foggy or rainy days.

Cautions, Clean Up, and First Aid:

- AUS-V™ has low to no odor and has low VOC. Avoid contact with eyes and skin. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. If you experience watering eyes, headaches, or dizziness or if air monitoring demonstrates vapor levels are above applicable limits, wear a properly fitted respirator (NIOSH/MSHA TC 23C approved) during and after application. Follow respirator manufacturer's directions for use. Always use protective clothing, gloves and eye wear.
- Refer to SDS.477 for additional information before use.

Additional Notes:

- See document: *TD.200 – Resinous Flooring Guidelines* for information pertaining to rising damp, vapor transmission, and applicable recommended testing methods prior to use.

Suggested Storage:

- Store in a temperature and weather-controlled area between 65° F and 85° F / 18° C and 29° C.
- Do not allow to freeze.
- Shelf Life: 1 year from date of manufacture.