

**A-100**

**GENERAL DESCRIPTION**

A-100 is designed to seal and protect asphalt pavements such as roadways, airports, parking lots and playgrounds. A-100 will add a long lasting, dark black, like new appearance to any asphalt surface and is designed to outlast all other asphalt sealers on the market. If all handling and application instructions are followed, A-100 will extend and preserve asphalt pavement for many ears.

**A-100 PRODUCT DATA**

**A Sampling of test results and independent laboratory analysis**

* Type **(ASTM D-2397 &AASHTO M208)** - CSS1-H Asphalt Emulsion and Selected Fillers
* Uniformity **(ASTM D-977-91 & 97 & AASHTO M140-88)** - Homogenous
* Pounds per gallon **(ASTM D-244)** - 10.5 plus or minus
* Residue by evaporation **(ASTM D 2939)** - 54% to 60%
* Color when dry - Dark Black

·Odor-Mild

* Flammability **(ASTM - MNL #9)** - Non-Flammable
* Flash Point **(ASTM - MNL #9)** - None
* Effect of freezing **(While in Liquid Storage State)** - Damaging
* Storage Life - One Year
* Cone Penetration at 77 degrees fahrenheit **(ASTM D-217)**
  + Passes
* Wear/Scrub Resistance **(D-2486 - Modified)**
  + Unconditioned 6,000 cycles minimum - Passes
  + Conditioned 4,000 cycles minimum - Passes
* Wet track abrasion test **(ISSA TB#100 ASTM D 3910.6.4)**
  + 15.9 gm. per sq. ft.

# **SOURCES**

**AASHTO** (American Association of State and Highway Officials)

**ASTM** (American Society of Testing Methods)

**ISSA** (International Slurry Seal Association) **PACKAGING**

5 Gallon Pails, 55 Gallon Drums and Bulk Deliveries **FOOT NOTES**

The following is a general endorsement from the 'Asphalt Institute' regarding asphalt sealing technology: *"If one does not seal, fine hair line cracks appear in the pavements surface...and this is the start of* a *maintenance problem...By sealing we then extend the life of the pavements...if one* seals *immediately, and providing other variables that lead to pavement failure do not* come *into play, you should be able to extend the pavement life almost indefinitely..."* (Excerpt from letter by Carl W. Lubold, Jr., District Engineer, for the Asphalt Institute.)

# **PREPARATION**

Immediately prior to sealing, all asphalt surfaces must be thoroughly cleaned and contain no loose material, dirt, dust, and/or deicing chemical residue, etc. Surfaces that are impacted with hard clay, dust, and silt, that cannot be removed by mechanical sweepers or blowers must be pressure washed. If dirty surfaces are not properly cleaned, the sealer cannot bond or grip to the surface and de-bonding of the coating will occur. Sources of water run off such as landscape irrigation should be shut off, and the asphalt surface must be completely dry prior to application. New asphalt surfaces must cure a minimum of thirty days before application. Prior to final clean up and seal coat application, all asphalt patching, paving, crack filling, or other repair and construction work must be completed. Potholes, severely cracked areas, and similar surface defects must be repaired as needed with a suitable hot mix asphalt. Treat all grease, oil, gasoline, and similar petroleum build-up or stains with Prep Seal oil spot primer A-500. Cracks in excess of ¼" wide shall be cleaned and filled with Dura-Fill H.S. (Heat Stabilized) hot applied crack filler A-420 or approved equal.

**MIXING**

Concentrated Armor A-100 can be mixed with up to three pounds of #30 to #80 gradation silica sand per gallon. During application, A-100 and silica sand (if added), must be kept agitated and in a constant state of uniform suspension. Sand can be added to one or both coats. Prior to application, concentrated Armor A-100 may be mixed with water from

15-20% depending on surface conditions. A-600 can then be added to the diluted mix based upon a ratio of 1-3% per gallon of undiluted A-100. Silica sand should be added for steep inclines. Refer to chart below.

# **APPLICATION**

Concentrated Armor Seal and specified water dilution should be applied in parallel ribbons with a squeegee or approved spray application equipment. One or multiple coat application is acceptable method. Allow the first coat to dry sufficiently to withstand light vehicular and pedestrian traffic without damaging or scuffing prior to the application of the second coat.. Multiple coats should be applied in cross directions. It is recommended that Armor Seal A-100 be allowed to cure for 24 hours before opening to traffic. New (less than 60 days old) or heavily oxidized surfaces, should be prime coated with CSS1h, or A-100, diluted 100 percent (1 to 1) with water prior to the application of the first coat of sealer.

**COVERAGE**

Coverage (or yield) will range from 20 to 50 square feet per gallon, depending on surface conditions. Please refer to the following chart for recommended specifications.

# **TRAFFIC FREQUENCY**

* Light Traffic (Residential Driveways; Paved Playgrounds; Bicycle & Golf Cart Paths; Light Use Parking Lots)
  + **S/F per gal of undiluted A-100:** 40 to 50 s/f per gallon
  + **Armor A-600 Optional:** 1 % to 3% per gallon of undiluted A-100
* Moderate Traffic (Residential Streets; Multi-Family Housing; Light-Moderate Use Retail & Commercial Parking)
  + **S/F per gal of undiluted A-100:** 35 to 40 s/f per gallon
  + **Armor A-600 Optional:** 1 % to 3% per gallon of undiluted A-100
* Heavy Traffic (Industrial and Commercial Facilities; Rail and Port Facilities, Heavily Used Parking Areas; Airport Taxiways & Shipping Terminals)
  + **S/F per gal of undiluted A-100:** 20 to 30 s/f per gallon
  + **Armor A-600 Optional:** 1 % to 3% per gallon of undiluted A-100

# **CLEAN UP**

Clean up tools and equipment with water. Use diesel fuel if material has hardened.

**CAUTIONS**

Stir and mix thoroughly before using. Do not apply when temperature is below 60° F. Do not apply if rain is expected within 24 hours of application. Keep from freezing. Close containers when not in use. Do not store containerized sealer in direct sunlight or above 100° F. Do not expose containerized sealer to open flame. Not recommended for steeply inclined surfaces which may become slippery when wet.

The methods and techniques described in this application bulletin represent some that have been used successfully to obtain the desired results. All variations in asphalt, climate conditions and equipment cannot be anticipated by Cascade Asphalt Sealing. The decision to use any of these methods and techniques is entirely at the election and responsibility of the user.

**WARRANTY AND DISCLAIMER**

**The statements made on this technical bulletin are believed to be true and accurate, and are** intended to provide a guide for approved construction practices. Cascade Asphalt Sealing Co. **does not make, nor does it authorize any agent or representative to make any warranty, express or implied, concerning this material as workmanship, weather, equipment utilized, and other** variables affecting results are all beyond our control. Cascade Asphalt Sealing Co, warrants only that the material conforms to product specifications and any liability to the buyer or use of this product is limited to the replacement value of the product only. In no event shall Cascade Asphalt **Sealing Co. be liable for any injury, loss or damage, either direct or incidental, special or consequential. arising in connection with material or work performed. Cascade Asphalt Sealing**

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