ARMOR SEAL A-100 HS(High Solids)

General Description

Armor Seal A-100 HS Heavy is Cascade Asphalt's High Solids formula that can be applied in one coat systems. **Armor Seal A-100 HS** is a high performance, mineral reinforced asphalt emulsion sealer, blended with polymers and specialty surfactants for superior adhesion, flexibility, and durability.

Polymer Modification Makes the Difference! **Armor Seal A-100 HS** is fortified with polymers and specialty chemicals that impart it toughness, flexibility, adhesion, and weather resistance. Rubberizing polymers are built directly into **Armor Seal A-100 HS** during the manufacturing process. No other additives are needed

Fiber Reinforcement- Specialty fibers are added to provide flexural strength and bridging characteristics to **Armor Seal A-100 HS**. Fiber reinforcement provides a more durable surface coating. **Armor Seal A-100 HS** is formulated specifically to protect and enhance asphalt pavement surfaces including commercial and residential parking areas.

Specifications & Product Data

Specifications Compliance		
Test Properties	Method	Result
Cone Penetration@77F, dmm	ASTM D5329	364
WTAT, loss g/m (g/ft)	ISSA TB100	-4.7
% Residue	ASTM D2939#8	63
% Volatiles	ASTM D2939#9	37
% Solubility in TCE of residue	ASTM D2939#21	25.22
Resistance to heat	ASTM D2939#14	Pass
Resistance to water	ASTM D2939#15	Pass
Flexibility	ASTM D2939#16	Pass
Resistance to impact	ASTM D2939#26	Pass
Armor Seal A-100 HS Product Data		
Type- CSS1-H Asphalt Emulsion and Selected Fillers & Fibers and chemicals	ASTM D-2937 ASSHTO M208	Yes
Uniformity	ASTM D-977-91/97	Yes
Weight/gallon	ASTM D-244	(+/-)10.3
Color when Dry		Dark Black
Odor		Mild
Flammability	ASTM-MNL#9	Non-Flammable
Flash Point	ASTM-MNL#9	None
Effect of Freezing-Liquid State		Damaged
Cone Penetration @ 77 F	ASTM D-217	Pass
Wear/ Scrub Resistance, Cycles	ASTM D-2486-Mod.	> 5000 Cycles
Wet Track Abrasion resistance	ISSA TB100	15.9 Gms,
	ASTM D3910.6.4	

Sources
AASHTO (American Society of Testing Methods)
ISSA (International Slurry Seal Association)

Outstanding Properties of Armor Seal A-100 HS

- Highly Durable- Polymerized sealer provides tough surface for fewer power steering marks.
- Superior flexibility with ability to bridge over minor cracks.
- Rubberized for added flexibility, adhesion, and resistance to wear.
- Superior Water repellency, Resistant to re-emulsification in the presence of de-icing salts.
- Designed for heavy aggregate loading.
- No other additives are needed.
- Dries fast to a beautiful/black color.

Recommended Uses

Armor Seal A-100 HS is recommended for all asphalt surfaces; home driveways, commercial properties, apartment complexes, restaurants, schools, walkways, recreation/play areas, theme parks, airfield/taxiways/airport shoulders, and many more.

Mix design per 100 gal. of Conc. Armor Seal A-100 HS Armor A-600 (Maxi-Tuff) is Optional @ 1-3% in all mix designs.				
Traffic	**Components**		**Application Rate for 1 coat**	
	Water-gal.	Sand*-lb.	Conc. Gal/Sq. yd.	Mixed, Sq. Ft/Gal.
Light	15-20	0-200	0.15-0.19	40-50
Medium	15-20	100-200	0.15-0.20	35-40
Heavy	15	300	0.22-0.33	20-30

Sand/aggregate shall be clean, angular and within 50-70 AFS gradation.
Water shall be clean, potable and low in iron content.
The coverage rates may vary depending upon the age, porosity and porosity.

Surface Preparation

Prior to sealcoating, all asphalt surfaces must be thoroughly cleaned and be free from all dirt, dust, debris and/or deicing chemical residue, etc. Surfaces that are imbedded with hard clay, dust, and silt, that cannot be removed by mechanical sweepers or blowers must be pressure washed. Premature disbonding and failure may occur if sealcoating is applied on improperly cleaned surfaces. Prior to final clean-up for sealcoating, 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 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.
Sources of water run-off such as landscape irrigation should be shut off, and the asphalt surface must be completely dry prior to application.

Special Instructions

Apply only on unsealed asphalt or surfaces that have been previously sealed with asphalt or refined tar based sealcoatings. Do not apply over surfaces sealed with gilsonite and other solvent based sealcoatings.
New asphalt surfaces must cure a minimum of 90 days before application.
Perform a water break free test to confirm that surface oils have dissipated.
Old, oxidized and powdery surfaces shall be prime coated with CSS1h, or A-100 HD, diluted 100 percent (1 to 1) with water prior to the application of the first coat of sealer.
Not recommended for steeply inclined surfaces which may become slippery when wet.

Application and Cure Times

Use conventional tools, brush, squeegee or spray, for the application of the mixed sealer (per mix design), in parallel ribbons. Apply one or multiple coats as specified for the project. 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. Allow the final coat to dry a min. of 24 hrs. prior to opening to traffic use.

Dry and cure times will vary according to the ambient temperatures and relative humidity during and after the application. Lower temperatures, high humidity and lack of sunlight will prolong the cure time. The converse is true for good and through drying of the sealcoating.

Important Weather Considerations

Surface and air temperatures should be a min. 60 deg. F and rising.

Do not apply on rainy, foggy or extremely humid days, or when rain is in the forecast withing 24 hrs. of application.

Dampen the pavement with a mist of water or add additional 5% water to the mix design if the surface temperature is in excess of 100 deg. F.

Do not allow water to puddle on the surface.

Clean Up

Clean up tools and equipment with water. Do not discard washings in the bodies of water or down the sewer drains.

Use diesel fuel if material has hardened and dispose the washings according to applicable regulations.

Packaging

5 Gallon Pails, 55 Gallon Drums and Bulk Deliveries

Caution

KEEP FROM FREEZING/KEEP OUT OF REACH OF CHILDREN

Wear protective clothing. In case of contact, flush skin or eyes immediately with fresh water. If product gets in the mouth or eyes, see a physician immediately. Consult the Safety Data Sheet (SDS), for details.

Stir and mix thoroughly before using. Close containers when not in use.

Do not store containerized sealer in direct sunlight or above 100 degrees Fahrenheit.

Do not expose containerized sealer to open flame.

Notice

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, climatic conditions and equipment cannot be anticipated by Cascade Asphalt Sealing Co. The decision to use any of these methods and techniques is entirely at the election and responsibility of the user.