



# CHEM-CRETE ASP®

**Silicone Modified Asphalt-based Sealer & Internal Treatment for Asphalt Pavements, 55% Solids, Non-coal Tar**

## PRODUCT DESCRIPTION

CHEM-CRETE ASP is an asphalt-based sealer and internal treatment for asphalt pavements. It is engineered using a special blend of oxidized asphalt binder that is UV stable and very rich in its aromatic compounds and modified with several moisture-insensitive silicone-based compounds that have multifunctional active groups.

Although, CHEM-CRETE ASP provides the surface of treated asphalt pavements with an excellent water-repelling property due to the presence of the silicon compounds, it features an extremely low viscosity and low surface tension compared to conventional asphalt cutbacks and emulsions. Such properties allow it to flow easily through tight capillaries making it an internal treatment rather than a surface treatment for asphalt pavements where:

- It compensates for the aromatic compounds that might have been lost during the curing process and due to the oxidation reaction and UV attack.
- The active silicone compounds in CHEM-CRETE ASP minimize the losses of the aromatics in the pavement and minimizes oxidation, and thus expected to increase the service life of the pavement by two folds.
- It enhances the adhesion property and bonding strength between the pavement elements especially with the aggregates, thus dramatically reduces displacement and detachment as well as spontaneous emulsification due to moisture presence.
- It reduces the porosity of the pavement by sealing tiny voids from the surface side.

CHEM-CRETE ASP results in a significant increase in the stability and the resistance to deformation of asphalt pavements as it also keeps treated pavements internally and externally dry, thus eliminates all water and moisture associated problems. Therefore, it prolongs the life span of the asphalt pavements and dramatically reduces maintenance cost.



## ADVANTAGES & BENEFITS

- Ready to use and cold applied.
- Very low viscosity that allows for deep penetration through capillaries and voids.
- UV stable.
- Dry fast and thermally stable.
- Suitable for cold and hot climates.
- Seals cracks up to 3 mm without the need for routing or crack sealing.
- Enhances the bonding properties between pavement elements, thus eliminates surface deterioration chipping, and crack formation.
- Increases the stability of the asphalt pavement and its resistance to deformation.
- Eliminates damage caused by repeated freezing and thawing cycles.
- Permanently seals voids and capillaries, therefore provides asphalt pavements with internal waterproofing and moisture blocking mechanism from positive and negative sides.
- Excellent water-repelling function.
- Protects against chemical attacks caused by chlorine ions from de-icing salts, acids, and caustics.
- Enhances the adhesion property of road markers.
- Eliminates vegetation growth.

## FIELDS OF APPLICATION

CHEM-CRETE ASP can be used as a treatment and protection for all kinds of asphalt pavements. However, it is ideal and cost effective for all asphalt pavements in:

- Roads & Highways
- Airport Taxiways
- Parking Lots
- Bridges
- Tunnels
- Airport Runways
- Planes Parking Areas

## PACKAGING

Product	Packaging
CHEM-CRETE ASP	5 GAL (18.925 LITER) PAIL
	55 GAL (208 LITER) DRUM

## TECHNICAL SPECIFICATIONS

### Physical Properties:

Property	Value @ 25°C (77°C)	Test Method
Specific Gravity	0.91	ASTM D1475
Viscosity	100 cp	Brookfield
Solid Content, %	55%	-
Color	Black	-
Odor	Asphaltic	-
Fumes	None	-

### Product Performance:

Chem-Crete ASP complies with the following test standards:

- California Test 366 - Stabilometer Value
- ASTM E 303 - Surface Frictional Properties
- ASTM F 606 - Static Slip Resistance Test

### APPLICATION

**Preparation:** surface must be clean and sound prior to applying the product. Cleaning will open the surface pores and capillaries in order to enhance the penetration process. Compressed air or heavy duty mechanical brushing can be used to remove dust and loose particles from the surface. AGITATE WELL BEFORE APPLICATION

**Application:** CHEM-CRETE ASP is a ready to use material. It can be applied to asphalt surfaces in one single coat only by means of spraying, sweeping or brushing. For large-scale applications, such as asphalt highways, it is recommended to spray the product using a heavy-duty commercial sprayer.

**Coverage:** it is recommended to apply CHEM-CRETE ASP at an average rate of 100 to 110 ft<sup>2</sup> (2.45 to 2.7 m<sup>2</sup>/lit) in one application only.

**Crack Repair:** for cracks as low as ¼ in width, mix 1 volume of CHEM-CRETE ASP with 3 volumes of fine sand and pour into opened and pre-cleaned crack.

**Pot-Holes Repairs:** to repair small pot-holes (less than 4 sq. ft.), heat the pavement and break it around the pot hole. Spray the bottom of the pot hole with CHEM-CRETE ASP. Mix the broken pavement with CHEM-CRETE ASP, and compact it back into the pot hole area. For better performance, spray the compacted pavement with at an average rate of 100 to 110 ft<sup>2</sup> (2.45 to 2.7 m<sup>2</sup>/liter) in one application only.

**Limitations:** do not apply CHEM-CRETE ASP in the following cases:

- If temperature falls below 50°F

### STORAGE

CHEM-CRETE ASP must be stored under room temperature. Shelf life is minimum two years in its original unopened packaging.

### SAFETY PRECAUTIONS

#### KEEP OUT OF THE REACH OF CHILDREN

Adequate precautions and care must be taken during usage and storage. Avoid direct contact with eyes and skin. Keep away from children and animals. Any direct contact with skin, eyes, etc. should be washed thoroughly with clean water. Use proper safety wear, goggles, and mask, etc.

### TECHNICAL ASSISTANCE

Please contact International Chem-Crete Corporation for Technical Personnel.

### WARRANTY

**LIMITED WARRANTY:** International Chem-Crete Inc. warrants that, at the time and place we make shipment, our materials will be of good quality and will conform to our published specifications in force on the date of acceptance of the order.

**DISCLAIMER:** The information contained herein is included for illustrative purposes only and, to the best of our knowledge, is accurate and reliable. International Chem-Crete Inc. is not under any circumstances liable to connection with the use of information. As International Chem-Crete Inc. has no control over the use to which others may put its products, it is recommended that the products be tested to determine the suitability for specific applications and/or our information is valid in particular circumstances. Responsibility remains with the architect or engineer, contractor and owner of the design, application and proper installation of each product. Specifier and user shall determine the suitability of the product for specific application and assume all responsibility in connection therewith. AM130319

**Manufactured By:**



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