



# CHEM-CRETE PAVIX™

## The Ultimate Treatment & Protection System For Airport Runways, Bridges & Concrete Structures

### PRODUCT DESCRIPTION

**Chem-Crete PAVIX** is a unique water-based chemical product for the ultimate treatment and permanent protection of large-scale concrete substrates against temperature and moisture associated problems such as thermal cracking, damage caused by repeated freeze and thaw cycles, chloride ion penetration, as well as alkali silica reactions.

**Chem-Crete PAVIX** keeps treated concrete reasonably dry, thus eliminates all water and moisture associated problems. **Chem-Crete PAVIX** provides three effective mechanisms for concrete protection in all weather conditions by formation of two types of crystals in addition to moisture repellency action. In the presence of water, one type of the crystals present in the product swells, therefore, blocking the pores completely. The second type of crystals absorbs the extra moisture on the surface of the first crystal preventing surface moisture on that crystal from diffusion to the concrete. These hygroscopic and hydrophilic properties provide double and durable protection against moisture penetration in concrete.

### ADVANTAGES & BENEFITS

- Provides permanent internal waterproofing and moisture blocking from positive and negative sides.
- Excellent repelling property preventing water, jet fuel and oil penetration from the surface.
- Resists aggressive chemicals such as acids, caustics Jet fuels and oil.
- Protects reinforcing steel bars against corrosion without any negative effect on existing steel cathodic protection.
- Enhances the adhesion property of joint sealant and concrete road markers.
- Reduces Alkali Silica Reactions (ASR), thus eliminates silicate dusting.
- Prevents penetration of chloride ions from de-icing salts.
- Eliminates damage caused by repeated freezing and thawing cycles.
- Prevents concrete scaling.
- Increases concrete hardness.
- Seals and protects cracks up to 1.5 mm.
- Designed for continuous water contact with the concrete, like seaports.
- Provides a non-slip finish of concrete roads, runways, walkways, etc.

### FIELDS OF APPLICATION

**Chem-Crete PAVIX** can be used as a treatment and protection against water and moisture associated problems for all kinds of concrete and cementitious structures. However, it is considered highly cost effective for the treatment of:

- Airport Runways
- Airport Taxiways
- Aircraft Parking
- Bridges
- Tunnels
- Concrete Roads-Highways
- Parking Lots
- Buildings
- Sea Ports
- Walkways

### PACKAGING

<u>Product</u>	<u>Packaging</u>	<u>Item No.</u>
<b>Chem-Crete PAVIX</b>	17 lit	95877/7
<b>Chem-Crete PAVIX</b>	200 lit	95878/5

### TECHNICAL SPECIFICATIONS

#### Physical Properties:

Specific Gravity:	1.07-1.08
Viscosity:	2.4 centipoises
Freezing Point:	-4°C
Boiling Point:	104 °C
Environmental Hazards:	None
Color:	Clear
Odor:	None
Toxicity (EPA-821-R-02-012):	None
Fumes:	None
Flammability:	None

#### Product Performance:

**Chem-Crete PAVIX** complies with the following standards:

#### American Society for Testing and Materials (ASTM):

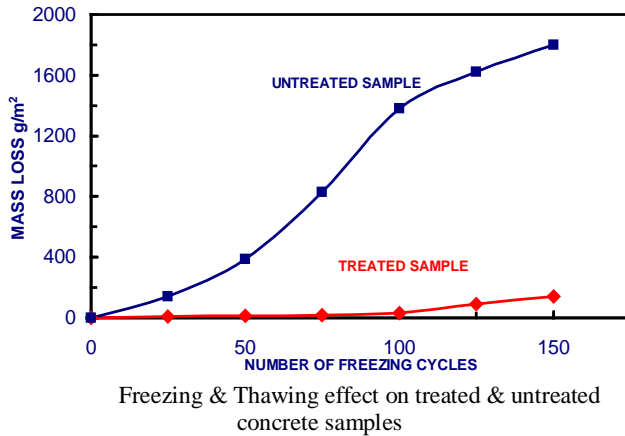
- ASTM C 666 Resistance of concrete to rapid freezing & thawing
- ASTM C 672 Scaling resistance of concrete surfaces exposed to de-icing chemicals
- ASTM C 1218 Water-soluble chloride in mortar and concrete
- ASTM C 944 Abrasion resistance of concrete surfaces
- ASTM F 609 Static slip resistance
- ASTM E 303 British Pendulum Test
- ASTM D 4541 Coating Pull Off Strength

### Czech Republic Standards:

- ČSN 73 1326 Surface Corrosion  
Resistance Test of Cyclic  
Freezing in Salt Solution
- ČSN EN ISO 2812-1 Chemical Resistance Test
- ČSN 73 6177 Surface Skid Resistance
- ČSN 73 2578 Concrete Water-Proofing
- ČSN EN 1062-3 Concrete Water  
Absorption

### Russian Government Standards

- GOST 127030.5-84 Water Tightness
- GOST 12730.1-78 Density
- GOST 10180-90 Concrete Compression Test
- GOST 10060-95 Frost Resistance
- GOST 12780.1-78 Dressed squirrel skins
- GOST 22690-88 Strength by mechanical  
methods of nondestructive  
testing



### APPLICATION

Concrete surfaces must be clean and sound prior to application of the product. Cleaning will open the surface pores and capillaries in order to enhance the penetration process. Compressed air can be used to remove dust and loose particles from the surface. Flushing the area to be treated with water can improve the cleaning process, however for heavily contaminated areas; special concrete cleaning agents such as Chem-Crete **CONCLEAN CCC 060** can be used to remove dirt especially those contaminated with oil.

The surface must be allowed to dry prior to applying **Chem-Crete PAVIX**. For a new concrete, **Chem-Crete PAVIX** can be applied to concrete surfaces in one

single coat by means of spraying, sweeping or brushing. For old deteriorated concrete, a second coat can be applied only within the first 15 minutes of the application of the first coat. For large-scale applications, such as airport runways, it is recommended to spray the product using a heavy-duty commercial sprayer.

### Coverage:

It is recommended to apply **Chem-Crete PAVIX** at an average rate of 4.2 m<sup>2</sup> / lit in one coat.

### Limitations:

Do not apply **Chem-Crete PAVIX** in the following cases:

- If temperature falls below 5°C.
- To areas previously treated with sealing agents unless these sealers are removed by chemical or mechanical means.

### STORAGE

**Chem-Crete PAVIX** must be stored under ROOM TEMPERATURE. Cold temperatures may cause the product to crystallize. Shelf life is ONE YEAR 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.

### NOTICE

The information given in this publication is based on present state of our knowledge. Any recommendations and suggestions are made without guarantee since the conditions and procedures are beyond our control. Buyers and users should make their own assessment of our product under their own conditions and for their own requirements.

### TECHNICAL ASSISTANCE

**Saudi Chem Crete Co. Ltd.** technical department with its highly trained and qualified Chemicals Marketing Advisory team provides a complete service in the field. Please consult your nearest service/sales department for assistance.

Field services where provided, do not constitute any supervisory responsibilities.

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