



ARCOY INDUSTRIES (INDIA) PVT. LTD.

Your partners in corrosion prevention
An ISO 9001 : 2000 Company



AROPLEX - K

INTRODUCTION :

AROPLEX - K is a Potassium Silicate Based Cement.

AROPLEX - K cement is resistant against a wide variety of acid conditions and covers almost the entire range of temperatures encountered in chemical plant process condition.

AROPLEX - K cement withstands temperatures up to 800°C. For higher temperatures our **REFERETE** cement is recommended.

AROPLEX - K sets hard and dense.

AROPLEX - K is easy to use and apply.

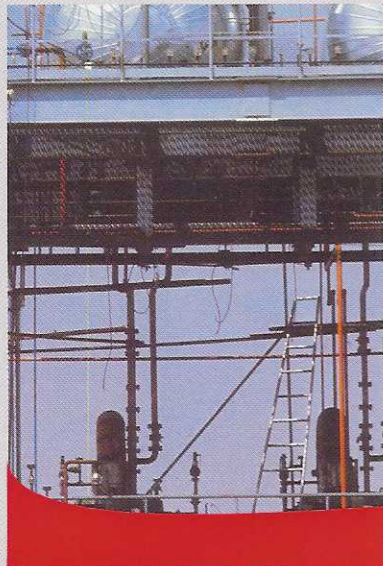
PREPARATION :

Mix 2.5 to 3 part of POWDER (by weight) to one part of solution (by weight) to form the mortar.

Mix only that much quantity which can be used in about twenty minutes. When the mortar starts to set it must be discarded, as it cannot be re-tempered and used. The point at which the mortar has started to set and can no longer be used is determined by spreading the mortar on a brick surface with a trowel. When the mortar 'rolls up' behind the trowel, instead of adhering to the brick, the mortar must be discarded.

CONSTRUCTION NOTES :

- The place of brick work must be kept dry at all times until mortar is hard and cured.
- The bricks must be dry.
- Acid-proof bricks should not be laid at temperatures below 10° C.
- Keep the joints thin-up to 4 to 5 mm.
- Butter the brick with excess mortar and slide them in place, then tap them firmly to produce thin joints. Cut off mortar that is extruded from joints.
- Allow brick work to cure for at least two days, then paint joints with 20% Hydrochloric or 30% Sulphuric Acid before placing in service.



*Sturdy, Strong, Reliable,
Modern...only Arcoy*

**CORROSION
NO ENTRY**



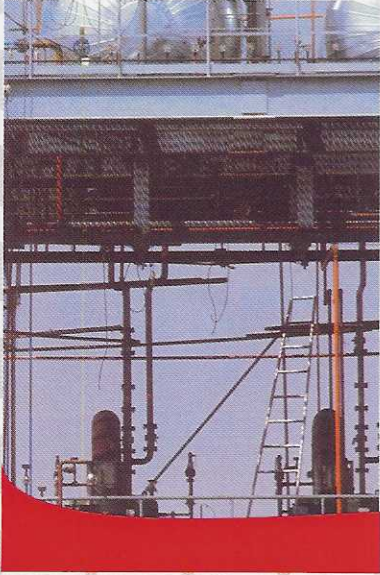
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When lining the concrete tanks or similar equipments, the concrete should be first protected with a membrane of **Arocompound**. Steel tanks should be protected with rubber or P.V.C., depending upon the acids being handled and temperature of the solution. The membrane is then protected with acid-proof brick lining, **CONSULT US FOR DEFINITE RECOMMENDATIONS.**

After giving enough time for proper curing with acid, **AROPLEX - K** is ready to be placed in service.

USES :

AROPLEX - K adapts to a great range of acid concentrations & temperatures. Which is why it is widely used for laying acid-proof brick lining in Chemical Plant equipments of all kinds including tanks, towers, stacks, fume ducts etc

AROPLEX - K, if subjected to acidic conditions, can be used in furnaces and steel vessels.

RECOMMENDATIONS :

AROPLEX - K is recommended for Chemical Plants, Dye Manufacturers, Metallurgical Industries, Explosive Manufacturers, Textiles Mills, Storage Battery Manufacturers, Plastic Industries, Oil Refineries, Fertilizers, etc. where Mineral Acids (except HF.) such as Chromic, Nitric, Hydrochloric, Phosphoric Sulphuric (alone or in combination) are used or dealt with.

Mixing Ratio :

Mix 2½ to 3 parts (by weight) of powder to one part of the solution to form the suitable mortar.

NOTE : **AROPLEX- K** is not recommended for alkaline and aqueous media.

SHELF LIFE : 1 Year at Room Temperature (under shade)from the Date of Mfg.

**CORROSION
NO ENTRY**



AROPLEX - K

Physical properties of Potassium Silicate Based type chemical resistant mortars when tested exceeds I.S. 4832 test requirements.

| Property | Requirement as per IS-4832 Part-I | ARCOY'S Test results |
|--|-----------------------------------|----------------------|
| Working time min. at 27° C ± 2° C (mins.) | 20 | 25 |
| Flexural strength min. kg/cm ² (at 7 days) | 40 | 45 |
| Compressive strength min. kg/cm ² (at 7 days) | 150 | 165 |
| Bond strength min. kg/cm ² (at 15 days) | 5 | 5 |
| Absorption of Toluene max. percent (by weight) | 18 | 15 |

SERVICES :

The ARCOY Technical department is maintained to provide assistance and advice on any problem of acid or alkali- proof construction. Write to us about your service conditions to obtain prompt recommendations and design suggestions. We will be more than glad to be of assistance.

