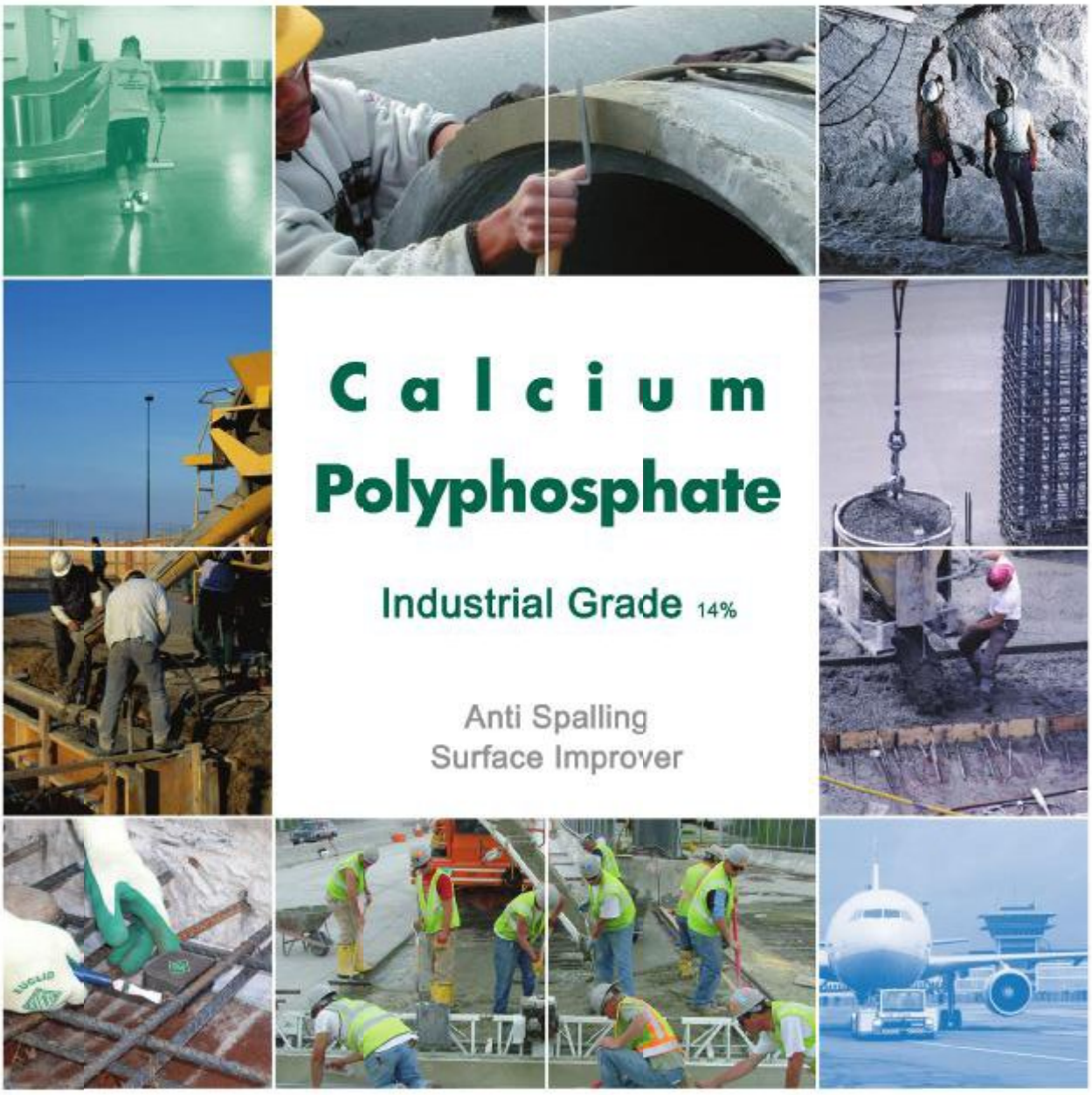
Qingzhou Jintong Chemical Industry Co. Ltd

A Member of Nutrix Group

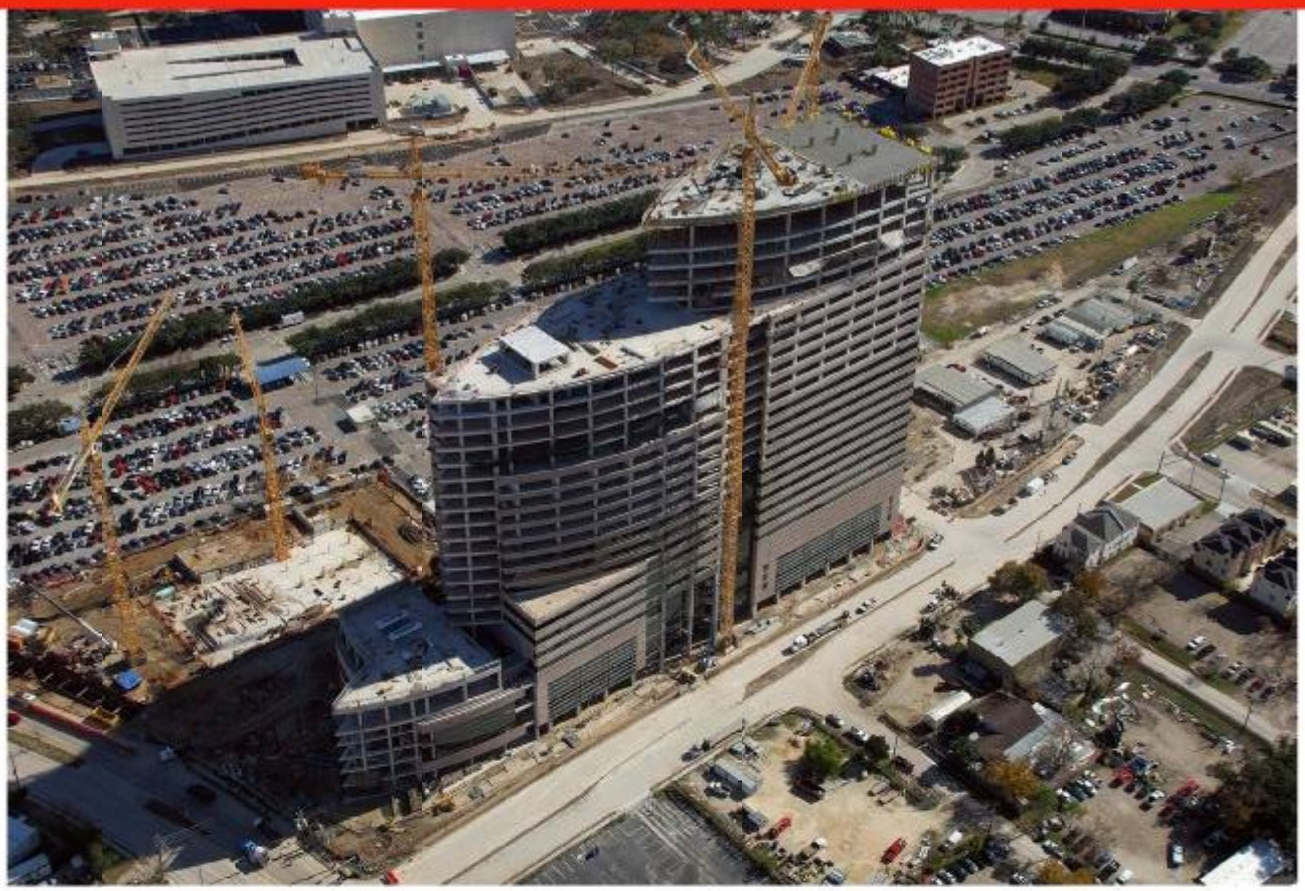


Calcium Polyphosphate

Industrial Grade 14%

Anti Spalling
Surface Improver

June 2008



What Is Calcium PolyPhosphate

Calcium Polyphosphate is used to treat concrete aggregate and concrete to improve its resistance to natural and salt induced breakdown. The Calcium Polyphosphate can also be used in association with road salt to prevent spalling and breakdown of concrete surfaces and damages to cars. Used alone as a surface treatment, it has the same effect.

When concrete is fresh, it is very highly alkaline. This alkalinity protects reinforcing steel from rapidly corroding. Unfortunately,uncoated concrete readily absorbs moisture and carbon dioxide,which in turn neutralise the concrete, lowering its alkalinity and thus allowing steel to corrode. When steel corrodes, the iron oxide corrosion products occupy up to eight times the original volume of steel, creating stress in the concrete.

Whilst compressive strength of concrete is very high, its flexural strength is relatively weak, and so the concrete cracks around the reinforcing steel.

Calcium Polyphosphate is for the benefaction of an aggregate to improve its resistance to natural and de-icing salt induced breakdown and to improve the resistance to that breakdown of concrete and bituminous mix produced therewith. the Calcium Polyphosphate is also useful for preventing spalling and breakdown of concrete surfaces due to road salt and freezing and thawing, as well as of corrosion of reinforcing steel

As a result of tests which were made by using the teaching of the present product, it has been found that when an aggregate used in concrete or `blacktop` mix is treated with a relatively dilute solution of calcium polyphosphate, its resistance to breakdown due to natural weathering, to freezing and thawing, and to road salts is significantly improved, making it particularly resistant to road salt.

Thus it is possible to use lower quality aggregate and significantly reduce the aggregate failure. Aggregate resources not utilized now because of their low quality could become commercial.

The Calcium Polyphosphate treatment could be applied during normal processing of the aggregate at the pit or quarry with minimal extra operational costs.

It is believed that the Calcium Polyphosphate , upon entering the rock pores, is partially precipitated, rendering long-term protection. However, some remains in soluble form, and may be leached out in time. Laboratory leaching studies show that repeated leaching does reduce protection to varying degrees, but significant degree of protection still remains.

Treated with calcium Polyphosphate

Un-Treated with calcium Polyphosphate

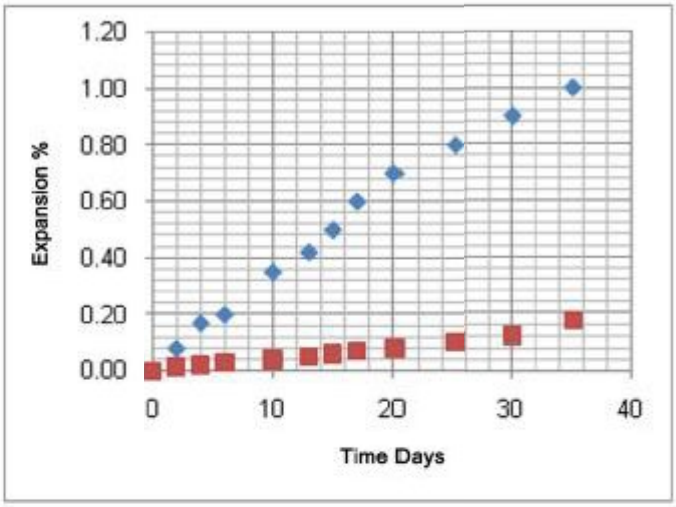
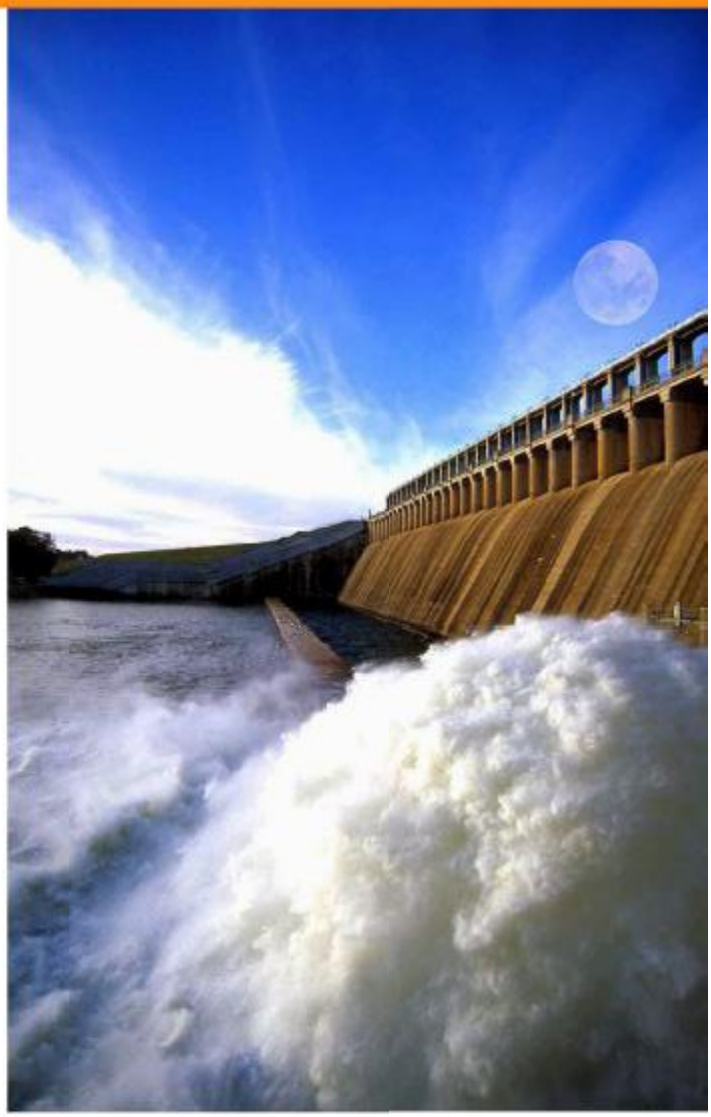


FIG1: shows an example of expansion of untreated and treated aggregate with calcium polyphosphate



USES

- Exterior, horizontal vertical concrete surfaces
- Concrete pavement and roadways, bridge decks and abutments
- Municipal, commercial or industrial pavements
- Slab-on-grade parking areas, vehicular storage Garages
- Drilling mud fo oil well concrete
- Dam Concrete

ADVANTAGES

- Protects concrete from deterioration due to deicing chemicals and salts
- Penetrates to provide excellent resistance to scaling and spalling caused by freeze/thaw cycling
- Formulated to meet the Pennsylvania Departments of Transportation specifications
- Prolongs the life of concrete

DIRECTIONS

1. the estimated dosage required is from 0.01% to 0.5%
2. Validate the dosage required from field trials.
3. For batch blending add the Calcium Polyphosphate to each batch of concrete aggregate for approximately 15 minutes to insure proper dispersion. Minimum blending time needs to be validated by taking samples from different locations of the blender at different blending times.
4. For in-line or continuous blending it might be better to dilute the calcium polyphosphate to insure proper addition. Use calcium carbonate or hydratec gypsum as the filler in proportions of 9 parts filler to 1 part Calcium Polyphosphate for 10% activeingredient. Or use 1 part Calcium Polyphosphate to 99 parts filler for a 1% active ingredient , Calcium PolyPhosphate does not contain any materials that interfere with Portland cement or Calcium Aluminate cements. Recommended for industrial use only.

Calcium Polyphoshate

Chemichal properties:

DEFINITION	COMPLIES WITH THE TEST
Characters	A white, colorless crystal or granules
Identification	Complies with the test
Assay	99.0%~101.0%
Loss on drying	11.0%~13.0%
Mesh (more than 80%)	60
PH (In 1% Solution)	3-6.5
Moisture	≤5%
Insoluble in acid	≤3%
Dry Matter	>95%
Phosphorus	14-25 %

STORAGE :

Store tightly closed containers in cool, dry area away from direct sunlight and sources of heat. Shelf life of properly stored material is two year from date of manufacture

Packahing:

25 or 50 kg PP Bags with liner











OUR CONSTRACTION

Save Money. Our admixtures are pre-weighed and dosed; there's no need to buy expensive dispensing equipment. Powdered admixtures are 100% active so you never pay to ship water. They are not subject to freezing, and the have a long shelf-life.

Save time. Our products are easily added at the job site, with no need to re-weigh or measure bulky liquids. You can extend your deliery times when the unexpected happens.

Make the job easier. Just open the outer bag and add the inner to concrete right in your truck. The products are easily carried by operators, whose risk of on-the-job injuries is reduced.

Simple field corrections of concrete mixes are possible.

Award Winning. Two time winner of Most Innovative Product at the World of Concrete.

WARRANTY

The information and recommendations in this publication are,to the best of our knowledge, reliable. Suggestions made concerning uses or applications are only the opinion of Nutrix Corporation and users shouldmake their own tests to determinethe suitability of these products for their own particular purposes. Because of numerous factors affecting results, Nutrix Corporation makes no warranty of any kind, expressed

Calcium Polyphosphate

or implied, including those of merchantability and fitness for purpose. Statements herein, therefore, should not be construedas representations or warranties. The responsibility of Nutrix Corporation for claims arising out of breach of warranty , negligence, strict liability, or otherwise are limited to the purchaseprice of the materials.

About us :

QINGZHOU JINTONG CHEMICAL INDUSTRY CO., LTD is a member of Nutrix Group that established in China.

Nutrix Constraction department manufactures a complete line of concrete acmixtures and pump primers in powdered form. We have distributors and dealers throughout the U.S ,UK,Italy, China and sales worldwide. Nutrix Corporation was established in 1998. Our construction line of products has been in use since 1988. Our products are packaged in patented water-soluble bags,a unique method that no other co mapny can offer. Nutrix Corporation is a member of the following associations: the American Concrete Institute, the American Concrete P umping Association, the American Society of Concrete Contractors and it Decorative Concrete Council, the International Packaged Concrete Manufacturer's Association, the National Ready-Mix Concrete Association and the National Pool Plasterer's Council.

董事长致辞

Board chairman's address

在过去的岁月里，溢多利取得的每一点进步，都离不开全体溢多利人的辛勤工作与广大客户和社会各界的真情支持与厚爱!

发展永无止境，我们会继续加大科研投入，始终坚持“天然、绿色、无污染、无残留”饲料添加剂及动物药品的发展道路，不断开发出“节粮、高效、安全”的高品质绿色产品，并以完善的服务，真诚回报社会!

在未来的发展里，我们将继续与行业界朋友们一起，为我国饲料工业与畜牧业可持续发展不断做出新的贡献!

During the pass years, every progress that Nutrix made cannot be separated from the hard work of Nutrix staff and the sincere support of our customers and every circle in the society.

Development is unlimited. We will keep on enlarging the technological investment, insisting the develop direction of "Being natural, green, residual-free and pollution-free", and continually develop the high quality green product of grain economizing, high efficient and safe", and sincerely reciprocate the society with perfect service.

In the future development, we will devote all our efforts to maintain the development of our country's industry together with the friends from the same industry.

董事长:
Board chairman:

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SUITE 21 LORDS BUSINESS CENTRE LORDS HOUSE
665 NORTH CIRCULAR ROAD
LONDON
NW2 7AX
www.nutrixgroup.co.uk
uk@nutrixgroup.co.uk