



PRODUCTS

Division of Sierra Corporation

TRI-MIX PLASTER MIX CEMENTITIOUS CONCRETE SURFACER

Meets Federal EPA's VOC Requirements

Technical Data

1. PRODUCT NAME:
TRI-MIX PLASTER MIX
CEMENTITIOUS
CONCRETE SURFACER

2. MANUFACTURER
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3. PRODUCT DESCRIPTION:
TRI-MIX PLASTER MIX is a dry cementitious concrete surfacer, designed to texturize, seal, waterproof and color concrete and masonry substrates. The mixture has a high viscosity which carries the coating into pores, cracks and voids, bonds permanently to the surface creating a dense, durable and attractive surface. TRI-MIX PLASTER MIX is meant to be used with TK-225, an acrylic bonding agent, for an improved bonding, adhesion, cohesion and durability characteristics, and chemical resistance.

Uses:

TRI-MIX PLASTER MIX is used on vertical, overhead and non-traffic bearing horizontal surfaces. It can be applied to precast and formed concrete, regular and light weight block, brick, stone, stucco, gunite, and other concrete and masonry surfaces. Typical applications are bridges, parapets, parking garages, tunnels, water tanks, silos, reservoirs, retaining walls, foundations, basements, and building walls. It may be used on interior or exterior, above or below grade applications. Used as an alternative to rubbing of concrete surfaces to hide defects and blemishes in architectural concrete.

TRI-MIX PLASTER MIX serves as an excellent base for TRI-SHEEN and TRI-LASTIC coatings.

4. TECHNICAL DATA:

Composition:

TRI-MIX PLASTER MIX is a blend of hydraulic cements, lime, pigments, plasticizers, dispersants and selected and finely graded aggregates.

Specifications:

TRI-MIX PLASTER MIX has been formulated to comply with the following:

- ASTM C-190, C-109, C-348, C-67, C-666.
- VOC Compliant
- Category: Flat Coatings-Exterior
- AIM Definition: A coating that is not defined under any other definition in this section and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to the American Society for Testing and Materials (ASTM) Method D 523-89, Standard Test Method for Specular Gloss.
- VOC content limit: 250 g/l

5. APPLICATION PROCEDURES AND INSTRUCTIONS

Surface Preparation:

Surface must be structurally sound, free of dust, dirt, paints, oils, grease, coatings, laitance, form release agents or any other surface contaminants. TRI-MIX PLASTER MIX depends on chemical and mechanical bond to the substrates. Sandblast, shot blast or high pressure water blast to clean the surface. Any surface that has a glaze or is very dense will require mechanical abrasion to gain proper adhesion. All cracks should be cut out and patched. Mortar joints should be in sound condition, any joints that are cracked need to be chipped out and remortared. All honeycombing and voids need to be patched. Form ties need to be broken beneath the surface and patched. All walls that have water coming through need to have weep holes drilled at floor level and

drained before application.

Fresh concrete should have gained sufficient strength before applying TRI-MIX PLASTER MIX, depending on the concrete mix and the temperature it could be 4 to 14 days before application. It's the applicators responsibility to make sure the surface is free of form oil and surface unhydrated cement so there is a good bond to the substrate and not the contaminants on the surface. Brush on a key coat of TRI-MIX (except on ceilings), at a rate of 2 lbs. per sq. yd. Use 1 part TK-225 to 3 parts clean water. If surface is hot or material starts to drag, dampen surface with clean water.

Coverage:

Two coats will be required. The first coat, key coat, should be TRI-MIX applied at 2 lbs. per sq. yd. or 225 sq. ft. per 50 lb. bag. Allow to cure for 24 hours or overnight before applying the second coat. Second coat will be TRI-MIX PLASTER MIX applied at 4 to 6 lbs. per sq. yd. on good concrete and 6 to 9 lbs. per sq. yd. on masonry or coarse concrete, depending on form work and surface. The material should be applied to a thickness of 1/8" to 1/4". TK-225 should be added for better bonding and durability and hardness. Add 1/2 gallon of TK-225 to each bag of TRI-MIX and TRI-MIX PLASTER MIX.

Mixing:

TRI-MIX PLASTER MIX may be mixed by hand or mechanically mixed using a slow speed drill and paddle mixer. Mechanically mixing is preferred. A mortar mixer may be used for large jobs. Mix the powder into the liquid to keep the powder from forming lumps. The mixing liquid should be 3 parts water to 1 part TK-225. For a stronger bonding on dense or questionable surfaces, or on hot or windy days reduce mixing liquid to 2:1 or 1:1. Each 50# and 80# bag will use approximately 8 qts. of mixing liquid. Put 2/3 of the

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liquid into the container and add the powder as paddle is turning. Gradually add the remaining liquid to the mixture to bring the consistency to a heavy, completely blended pancake batter for TRI-MIX. Let the mixture sit for 5-10 minutes, remix, and if necessary, add more mixing liquid to adjust mixture to proper consistency. Retempering the mix to extend the pot life is not recommended. TRI-MIX PLASTER MIX should be of a mortar consistence for troweling. Do not overwet the mixture.

Application:

WORK IN SHADE AS MUCH AS POSSIBLE. Dampen the substrate with potable water before starting. This will prevent drag on the material and keep the substrate from pulling the moisture of the thin layer of TRI-MIX. TRI-MIX may be applied by sprayer or by brush. Spray application is the most cost effective application method on larger jobs. If applying by sprayer the first coat is to be brushed into the substrate to fill all voids and pores. Leave a textured surface for a good bond with the second coat. Allow to dry for 24 hours then apply the second coat. To avoid shadowing of deeply struck mortar joints, apply a light trowel coat of TRI-MIX PLASTER MIX (mixed with TK-225 and water) to the mortar joints and allow to cure 5-7 days before applying second coat.

Trowel and Float Finish:

To apply, use a steel trowel, firmly pressing the material into all voids and leveling it. When the surface is set so that it will not roll or lift, follow with a sponge float. The surface should be floated uniformly. Do not use water.

Sprayed-on Finish:

Mix to achieve a consistency suitable for a plasterer's type spray gun. To apply, spray on an evenly distributed coat of TRI-MIX PLASTER MIX. Keep the spray gun a uniform distance from the surface and move the nozzle with steady, even strokes. Do not angle the nozzle, as this will cause material build-up. Float or brush out the first coat to fill holes, pores and imperfections before applying a second coat. After material has set,

double back over the surface with one or more light spray applications to achieve a uniform texture.

Caution:

If rapid drying occurs because of very windy or hot conditions, mist spray with clean water for curing.

Limitations:

- Do not apply to surfaces that are not clean.
- Do not apply to painted surfaces, the paint needs to be removed.
- Do not apply to frozen or frost filled surfaces.
- Do not apply if the surface or air temperature is below 40° F. or expected to fall below 40° F. within 24 hours.
- Do not apply in rain or when rain is expected before initial set.
- If the weather is windy or hot the application should be frequently misted with water to prevent early dry out.
- If there are questions call a TK Products Representative for more information.

Safety Precautions:

TRI-MIX contains Portland cement which can cause irritation of the skin and eyes. Excessive and prolonged inhalation may result in headache, nausea, and eye or lung irritation.

First Aid:

Ingestion: Induce vomiting; call physician immediately. *Eye Contact:* Do not rub, flush with clean water for 15 minutes. *Skin Contact:* Remove by washing thoroughly with soap and water. If eye or skin irritation continues, obtain medical assistance. TRI-MIX may develop sufficient heat to cause burns if allowed to set in contact with skin. Use only for the purpose described. Do not take internally.

KEEP OUT OF THE REACH OF CHILDREN.

6. AVAILABILITY AND PACKAGING:

TRI-MIX is packaged in 50# bags; TRI-MIX PLASTER MIX IS PACK-AGED IN 80# BAGS; TK-225 is packaged in one, five and 55 gallon containers. These materials are available through TK Products Distributors; contact the TK Products Office for the nearest distributor.

7. LIMITED WARRANTY

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8. TECHNICAL SERVICES

The TK office offers assistance with specifications, performance test data and field services.

9. FILING SYSTEMS

Information Handling Services
PO BOX 1213
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Information Marketing Services
13271 Northend
Oak Park, MI 48237

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