

GENERAL PRODUCT INFORMATION BULLETIN
ADMIX 2000® ADMIXTURE FOR CONCRETE & MORTARS

ADMIX 2000®

ADHESIVE & FLEXIBILISING ADMIXTURE FOR MORTAR & CONCRETE

TEST A FREE SAMPLE FIRST - PRIOR TO ACTUAL USE. TRIALS ARE ESSENTIAL.

ADMIX 2000® IS AN ACRYLIC POLYMER RESIN BASED, RUBBER-LIKE LIQUID LATEX ADMIXTURE INTENDED FOR ADDITION AT A TYPICAL DOSE RATE OF 5%-10% BY WEIGHT OF THE CEMENTITIOUS MATERIAL TO FRESHLY MIXED LOW WATER CONTENT CONCRETE/MORTAR, CONCRETE PRODUCTS AND OTHER CEMENT-BOUND MATERIALS.

HAVING SUPERB BONDING PROPERTIES, **ADMIX 2000®** IS ALSO AN **IMPORTANT** COMPONENT FOR A **PROVEN** SITE-MIXED WATER-RESISTANT **BONDING AGENT FORMULA**. BONDING AGENTS ARE USED FOR STRONGLY ADHERING NEW CONCRETE AND VIRTUALLY ALL CEMENT, CEMENT/LIME AND HYDRATED LIME/GYPSUM PLASTER-BOUND MIXES TO EXISTING CONCRETE AND OTHER BUILDING SURFACES THAT ARE IN SOUND, FIRM AND CLEAN CONDITION.

ADMIX 2000® is a uniquely formulated, 100% acrylic (NOT PVA - Poly Vinyl Acetate) polymer-based modifier and strong polymer reinforcing additive for cement concrete, mortar, grout, concrete product mixes as well as for Gypsum and/or lime plasters etc. It is supplied ex-stock in 20 litre net open-top pails (approximately 5 US gallons) and 4 litre cans (one (1) US gallon) as a non-pigmented slightly viscous, but easily pourable thixotropic white liquid 'paste' (which 'dries' clear). It has numerous building industry uses.

A FIRMLY ADHERING STICKING AGENT

ADMIX 2000® may be used between the temperatures of 13°C and 30°C after mixing it with **fresh** cement, washed sand and a low quantity of water to easily make a highly economical high performance bond coat slurry mix (bonding agent) for application to existing surfaces in sound, firm and clean condition before applying (on the SAME day) new concrete to that surface or in the case of applied wall mortars, as a 'splash'/'dash' coat mix formula applied to the existing wall prior to rendering it with a suitable trowel applied mortar. This procedure effectively and permanently sticks new concrete/mortars to these surfaces. Application of this bond coat slurry mix is usually effected with broom/trowel and is suitable for most existing **stable, sound, firm and clean** building surfaces.

Details of this simple, easy-to-make and use waterproof adhesive bonding mix formula are available upon request. (Please read the Ability introductory letter for **ADMIX 2000®** accompanying this bulletin).

The product is also an exceptionally durable *supplementary* acrylic resin based binder for adding into decorative, protective, high build durable cement-based (cementitious) paints and 'wash' finishes for walls and pavements.

ADMIX 2000® MODIFIED WALL FINISHES, PAVING PAINT AND FLOOR TOPPINGS

The product is used to make cost-effective, especially well bonded, long-lasting cement-based trowel applied, decorative lime/gypsum-based solid plasters, applied to walls in interior or exterior situations by simply adding **ADMIX 2000®** white liquid into the required plaster mix.

It is also used to make colourful, crack-resistant paving paints and decorative concrete surface finishes (including those made on site to replace sprinkled dry mix 'dust on' pavement finishes, stencil and 'paver' effect finishes for concrete driveways and other pavements.

In addition, at temperatures between 13°C and 30°C it is an excellent reinforcing, strength-increasing, adhesion-promoting admixture for correctly formulated thin-section, granolithic concrete toppings for concrete factory floors, pavements, decks, suspended slabs etc which are required to have high resistance to wear and abrasion.

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AUSTRALIAN OXIDES PTY LTD, West Heidelberg, Australia.

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IT IS THE USER'S/PURCHASER'S RESPONSIBILITY TO ENSURE THAT COMPLETE SUITABILITY OF THESE PRODUCTS, FOR ANY USE, BE COMPLETELY CONFIRMED BY THOROUGH PRIOR TESTING AND EVALUATION. THE INFORMATION SUBMITTED IN THIS AND OTHER SPECIFIC PRODUCT PUBLICATIONS IS BASED ON CURRENT KNOWLEDGE AND EXPERIENCE. IN VIEW OF THE MANY FACTORS WHICH MAY AFFECT PROCESSING AND APPLICATION, THIS DATA AND OTHERS DOES NOT RELIEVE PROCESSORS AND USERS FROM THE RESPONSIBILITY OF CARRYING OUT THEIR OWN TESTS AND EXPERIMENTS. NEITHER DO THEY IMPLY ANY LEGALLY BINDING ASSURANCE OF CERTAIN PROPERTIES OR SUITABILITY FOR A SPECIFIC PURPOSE. IT IS ALSO THE RESPONSIBILITY OF THOSE TO WHOM WE SUPPLY OUR PRODUCTS, TO ENSURE THAT ANY PROPRIETARY RIGHTS AND EXISTING LAWS AND LEGISLATION ARE OBSERVED.

ADDITIVES FOR PRE-MIXED CONCRETE, FLOOR LEVELLING MIXES ETC

Additionally **ADMIX 2000®** may be evaluated as a highly efficient flexibilising and adhesion-promoting modifying admixture for adding into freshly mixed, low slump premixed concrete followed by a short but adequate re-mixing. In this way it is for example added into shotcreted/gunited sprayed concrete mixes and providing that an adequate dose is used a prior application to the substrate of the bond coat slurry mix previously mentioned is not usually necessary. **ADMIX 2000®** may be added into virtually all types of mortars, concrete screeds, overlayments, underlayments repair mixes and other cement-bound, gypsum plaster/lime bound or other hydraulic binding/water-wettable powder site-prepared wet mixes to increase their adhesion and flexibility characteristics.

Other uses include that as an admixture for factory compounded ready-to-use concrete and mortar dry-mixes, supplied to the tradesperson or general public in paper bags that do not contain acrylic or other resin polymers such as some cement-bound ceramic wall and floor tile setting, grout powder mixes, 'thick-bed' and 'thin-bed' trowelling and filling/patching 'plasters', cement bound levelling dry mixes for concrete floors and walls etc.

ADMIX 2000® liquid is mixed into these cement bound mixes in their prepared freshly mixed, water dampened state on site immediately prior to use.

Simply use about 20% ($\frac{1}{5}$) **less** water than normal and mix the concrete or mortar component materials **well** - for at least 10 minutes. Then minimally (lightly) but adequately, mix **ADMIX 2000®** into these low-slump, damp, semi-dry mixes at a typical dose of 5% to 10% by weight of the binding material and with continued thorough mixing after their consistency changes to normal, place/apply normally.

ADMIX 2000® increases workability and application qualities of freshly made damp, semi-dry mortar and concrete as well as the adhesion, flexibility, impact and other mechanical strengths of these materials when hardened after setting.

THE SUMMARISED ADVANTAGES AND BENEFITS OF ADMIX 2000® INCLUDE:

- The main use of **ADMIX 2000®** is as a flexibilising, flexural, tensile and bond strength-increasing admixture added into freshly prepared, low water content cement-based mixes and/or as a component in an excellent bond coat slurry mix formula. The product may be added into virtually all prepared cement-bound water dampened mixes, having a temperature of 13°C minimum and 30°C maximum, to make them last longer in their hardened states. Also to enable the use of thinner concrete sections and mortar applications and to ensure an exceptionally strong bond to the substrate - thus preventing loss of adhesion and 'drumminess'.
- **ADMIX 2000®** usually results in the reduction of apparent shrinkage in properly designed low water content cement and other hydraulic material bound mixes and flexibilises them by increasing flexural and tensile (pulling) strength. The product

therefore considerably reduces or eliminates cracking as well as creating substantial extra bond. High accuracy of dose is usually not absolutely essential. However, up to a certain point (about 20% by weight of the binding material) when the mix may become too 'sticky', generally the higher the dose, the better the results.

- The product is easy and safe to use in and is suitable for most freshly mixed cement and freshly prepared lime/gypsum plaster-based mixes.* Properly designed **ADMIX 2000®** modified mixes processed in medium to high humidity conditions tend to be self curing. They ultimately tend to become very hard yet flexible and very durable.
- The product assists in the production of when hardened, very strong, waterproof, thin section trowel-applied cement rendering mortar for wall coatings/finishes/surfacings etc which feature low or nil maintenance and long-lasting qualities. Properly designed, these during preparation are simply and easily mixed **well** on site from components consisting of fresh cement, good concrete sand and/or other suitable fine aggregate (**without** 'fines'), a suitable - preferably **low** - proportion of drinkable water and **ADMIX 2000®**.
- **ADMIX 2000®** is used for making simple, cost-effective, site-mixed colourful cementitious (cement-bound) high-build, waterproof paints/coatings applied by brush or broom and 'bagging' mixes applied with a damp hessian bag or other suitable means for use on walls, roofs, and pavements which last and last. It acts with the cement - as the *extra* adhesive binder. Please ask for additional printed information and starting point formulae.
- **ADMIX 2000®** additive may be evaluated by manufacturers for increasing the strength of factory produced low temperature autoclaved AAC - Autoclaved Aerated Lightweight concrete blocks such as 'Ytong' and 'Hebel' products for a given density ie when it is intended to produce special higher strength types having the same light weight per unit volume.
- **ADMIX 2000®** may be made available *on firm advance order* with a delay of about five (5) working days in 20 beautiful permanent pastel colours using Ability's 'abilox®' mineral oxide pigments. These are typically of the earthy, subtle tone, natural 'ochre' hues of nature. Alternatively, separate 'abilox®' powder pigments may be used for permanent UV resistant colouring in cement/lime/plaster bound mixes with *clear* un-pigmented **ADMIX 2000®**. Standard clear (non-coloured) **ADMIX 2000®** is normally available ex stock.
- This thick, fairly viscous liquid product requires only simple, easy site addition - preferably late in the mixing cycle - to prepared low slump, 'semi-dry', damp cement bound mixes and subsequent application by handypersons or skilled tradespersons for excellent results.

CREATIVE COLOURED WALL FINISHES THAT ARE VISUALLY 'DIFFERENT', PERMANENTLY COLOURFUL AND DURABLE

When mixed into, at an optimum dose, the recommended **ADMIX 2000®** bond coat slurry mix recipe (please read **ADMIX 2000®** product letter) with a suitable dose of one of Ability's 'abilox®' fine, dry powder cement pigments from their range of over 40 colouring shades, the resultant decorative textured liquid mixture may be easily applied and processed by artists and

* **DOSE RATE:** A typical dose rate is 3-5 litres **ADMIX 2000®** per nominal 40kg bag of cement or 25 kg bag of gypsum plaster. Higher dose rates up to 10 litres/bag usually resulting superior final results of the hardened material but may cause the mix to become too 'sticky' for normal applications or placement. **TEST FIRST BEFORE ACTUAL USE.** A free sample will be provided upon request for this purpose. **ADMIX 2000®** in gypsum plaster and/or lime based mixes for best results should not exceed 10% by weight of the weight of gypsum plasters. All mixes must have a minimum temperature of 13°C and a maximum temperature of 30°C otherwise the problems that may affect the material at lower or higher temperatures may cause a job failure.

artisans to uniformly

dampened surfaces and allowed to set and harden in many varied attractive textured or smooth, flush applied finishes. These finishes are suitable for concrete surfaces, masonry brick/block-work etc surfaces and may include smooth trowelled, 'travertine scratch' finishes, using a suitable proportion of large particle size sand with the required special technique, as well as attractive permanent 'bagged' brick-work, painted brush or roller applied finishes, 'sandy' finishes, broom finishes, swirly 'Spanish' and 'Venetian' stucco finishes etc applied by relevant experienced plasterers, bricklayers and painters.

MAKE YOUR OWN FLOOR AND WALL TILE ADHESIVES

ADMIX 2000® mixed with correctly proportioned fresh Portland cement (usually white or off-white instead of grey cement) and suitable sand or other fine aggregate can help in making after confirming its suitability by testing and evaluation, excellent water resistant, permanent cement-bound adhesives for ceramic wall/floor tiles and other adhesive uses as well as easy-to-mix, durable cement-based road, car-park and traffic/line marking paints that feature very low cracking potential and very high wear resistance. *Please ask for further information about 'Render-Pave' paint and/or wall and floor tile adhesive formulations.*

EXTRA HIGH QUALITY RESULTS

ADMIX 2000®, used at an optimum dose rate and in mixes of the correct temperature range (+13°C, -30°C) increases the tensile, flexural and bond strength of concrete and mortar, concrete products, lime and/or cement bound coatings and washes etc (when tested in a dry state) by worthwhile amounts to considerably reduce cracking potential.

ADMIX 2000® is suitable for use in virtually all correctly proportioned cement-bound recipes, formulae and mix designs - especially when used in conjunction with Ability's '**COSMOTRON®**' **DPU-AC**, super water reducing and super plasticising instantly dissolving powder admixture. (Please request a separate product data sheet and printed information for '**COSMOTRON®**' **DPU-AC** powder admixture for concrete and mortars *which allows the use of **even less** water in concrete, mortars etc for the **same** consistency*) to result in even higher bond/other mechanical strengths.

MECHANICAL STRENGTH INCREASES

At high optimum dose (10 litres per nominal 40kg bag cement) the BOND strength of **ADMIX 2000®** modified cement-based concrete, mortars etc, is typically

CARE: Do NOT use ADMIX 2000® at temperatures below 13°C or above 30°C.

PLEASE DIRECT ALL ENQUIRIES FOR AUSTRALIAN SUPPLY AND EXPORT ORDERS FOR **ADMIX 2000®** - THE ADMIXTURE WITH SUPERB BONDING PROPERTIES & OTHER UNIQUE ABILITY PRODUCTS TO:

ABILITY BUILDING CHEMICALS CO
SUBSIDIARY OF AUSTRALIAN OXIDES PTY LTD

Manufactures of fine, high grade UV resistant 'abilox®' mineral oxide colouring pigments, additives etc for many industries, powder-based 100% active solids chemical admixtures to modify, improve, protect and decorate various grades and classes of pre-mixed concrete, mortars and grouts as well as factory prepared specialised high performance paints, surface coatings, stains and treatments for concrete and other building surfaces.

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Active selling agents and reselling stockists are required in some states of Australia and offshore. Contact us now for further details of this excellent commercial business opportunity.

TEST A FREE SAMPLE FIRST - PRIOR TO ACTUAL USE. TRIALS ARE ESSENTIAL.

PLEASE NOTE: **ADMIX 2000®** is now available as a similar but higher priced, improved performance, rapid dispersing **powder** formulation under the name '**ABIL-STRENGTH**'.

increased when the test samples are tested in a dry state by up to 400%, TENSILE strength by up to 150% and FLEXURAL strength by up to 200%.

COST-EFFECTIVE DURABLE RESULTS

ADMIX 2000® oil-acrylic latex-based admixture for concrete/mortars/plasters is priced only **slightly** higher than competitive, re-emulsifiable (non-water resistant) PVA^c (Poly Vinyl Acetate) 'so called' bonding agents and cement sticking compounds but has considerably greater economies, wider applications and superior performance characteristics.

OTHER USES FOR ADMIX 2000®

This emulsion latex polymer product at high dose rates is most suitable as a raw material for making applied flexible, jointless floor and pavement surfaces. These contain Portland or another cement type as the binding, setting and hardening agent as well as suitable aggregates. The aggregate may be marble or other decorative stone chippings and/or cork, and/or wood chips/fibres. If required, floors or pavements made of these materials may be ground, polished and buffed like terrazzo. Thicknesses may possibly be as low as 7mm (approximately 1/4 inch).

This highly adhesive mixture of rubber-like, polymer latex based **ADMIX 2000®** with cement is also used as a protective coating applied to steel reinforcement - which is to be later placed after the coating dries in aerated and normal concrete and as a dip coating for polymer/cement coated nails. After hardening, cement coated nails are used for fixing parquet floors and green timber and because they have a rougher surface than normal have higher wood holding power to help to reduce 'springing'.

ADMIX 2000® FOR USE WITH 'CHROMA-TEX' TYPE WALL FINISHES

Although not always essential this clear (colourless) **ADMIX 2000®** product may be used with 'CHROMA-TEX' type factory prepared, dry-mix wall finishes that do not contain acrylic resin powder to increase when hardened their mechanical strength and durability properties in place. Coloured 'CHROMA-TEX' dry mix plaster finishes are used essentially by professional plasterers for creating cost-effective, decorative trowel applied vertical wall finishes in a range of attractive colours (just add water, mix well and apply).

* Printed product data for **'ABIL-STRENGTH'** powder - an acrylic resin based modifier for use with cement, lime and/or gypsum-bound mixes - and a free sample will be readily mailed to you upon request.