

TECHNICAL DATA

Product No.
41.141

LEYCOSIT-ADMIX

CONCRETE ADMIXTURE FOR WATERPROOFING SYSTEM BY CRYSTALLIZATION

DESCRIPTION

LEYCOSIT is a unique chemical treatment for the waterproofing, protection and improvement of concrete. LEYCOSIT-ADMIX is added to the concrete mix at the time of batching. LEYCOSIT-ADMIX consists of portland cement and various active, proprietary chemicals. These active chemicals react with the moisture in fresh concrete and with the by-products of cement hydration to cause a catalytic reaction. This reaction generates a non-soluble crystalline formation throughout the pores and capillary tracts of the concrete that permanently seals the concrete and prevents the penetration of water and other liquids from any direction.

Note: The LEYCOSIT-ADMIX Series has been specially formulated to meet varying project and temperature conditions (see Setting Time and Strength). Consult with the Technical Department of LEYCOCHEM for the most appropriate LEYCOSIT-ADMIX for your project.

COMPLIANCE

LEYCOSIT-ADMIX complies with the requirements of AS 1478.1, as a type SN Special Purpose Admixture.

RECOMMENDED FOR

- Reservoirs
- Sewage and Water Treatment Plants
- Secondary Containment Structures
- Tunnels and Subway Systems
- Underground Vaults
- Foundations
- Parking Structures
- Swimming Pools
- Pre-Cast Components
- Roof Decks

ADVANTAGES

- Resists extreme hydrostatic pressure from either positive or negative surface of the concrete slab
- Becomes an integral part of the substrate
- Highly resistant to aggressive chemicals
- Can seal hairline cracks up to 0.4 mm
- Allows concrete to breathe
- Non-toxic
- Less costly to apply than most other methods

- Permanent
- Added to the concrete at time of batching and therefore is not subject to climatic restraints
- Increases flexibility in construction scheduling

DIRECTIONS FOR USE

LEYCOSIT-ADMIX must be added to the concrete at the time of batching. The sequence of procedures for addition will vary according to the type of batch plant operation and equipment:

1. **READY MIX PLANT - DRY BATCH OPERATION** Prior to concrete being batched, add LEYCOSIT-ADMIX in powder form to the drum of the ready-mix truck. After batching, mix the materials for 2-3 minutes to ensure the Admix is distributed evenly throughout the batch. A minimum of 10 minutes must elapse before discharge of the concrete. A further 1 minute of mixing at high speed immediately prior to discharge is recommended.
2. **READY MIX PLANT - CENTRAL MIX OPERATION** Mix LEYCOSIT-ADMIX with water to form a very thin slurry (e.g. 7.0 kg of powder mixed with 13.0 litres of water). Pour the required amount of material into the drum of the ready-mix truck. The aggregate, cement and water should be batched and mixed in the plant in accordance with standard practices (taking into account the quantity of water that has already been placed in the ready-mix truck). Pour the concrete into the truck and mix for at least 5 minutes to ensure even distribution of the LEYCOSIT-ADMIX throughout the concrete.
3. **PRECAST BATCH PLANT** Add LEYCOSIT-ADMIX to the rock and sand, then mix thoroughly for 2 - 3 minutes before adding the cement and water. The total concrete mass should be blended using standard practices.

Note:

1. It is important to obtain a homogeneous mixture of LEYCOSIT-ADMIX with the concrete. Therefore, do not add dry Admix powder directly to wet concrete as this may cause clumping and thorough dispersion will not occur.
2. LEYCOSIT soluble bags are most suited for use in the Dry Batch operation.

For further information regarding the proper use of LEYCOSIT-ADMIX for a specific project, consult with the Technical Department of LEYCOCHEM.

SETTING TIME AND STRENGTH

The setting time of concrete is affected by the chemical and physical composition of ingredients, temperature of the concrete, and climatic conditions. Extension of set time may occur when using LEYCOSIT-ADMIX.

The amount of extended set will depend upon the concrete mix design and the dosage rate of the Admix. Concrete containing LEYCOSIT-ADMIX may develop higher ultimate strengths than plain concrete. Trial mixes should be carried out under project conditions to determine setting time and strength of the concrete.

CURRING

The concrete has to be cured as standard concrete meeting the specific standards.

LIMITATIONS

When incorporating LEYCOSIT-ADMIX, the temperature of the concrete mix should be above 4°C.

PACKAGING

LEYCOSIT-ADMIX is available in 14.5kg and 20kg buckets and 3kg soluble bags. For large projects, customised packaging is available.

STORAGE

LEYCOSIT products must be stored dry at a minimum temperature of 7° C. Shelf life is one year when stored under proper conditions.

DOSAGE RATES

LEYCOSIT-ADMIX (No Fines Grade): 0.8% -1.0% by weight of cementitious content.

Consult with the Technical Department of LEYCOCHEM for assistance in determining the appropriate dosage rate and for further information regarding enhanced chemical resistance, optimum concrete performance, or meeting the specific requirements and conditions of your project.

TECHNICAL SERVICES

For more instructions, alternative application methods, or information concerning the compatibility of the LEYCOSIT treatment with other products or technologies, contact the Technical Department of LEYCOCHEM.

SAFE HANDLING INFORMATION

LEYCOSIT is alkaline. As a cementitious powder or mixture, LEYCOSIT may cause significant skin and eye irritation. Directions for treating these problems are clearly detailed on all LEYCOSIT buckets and packaging. The Manufacturer also maintains comprehensive and up-to-date Material Safety Data Sheets on all its products. Each sheet contains health and safety information for the protection of your employees and customers. Contact the Technical Department of LEYCOCHEM, or refer to our internet website www.leyde.com to obtain copies of Material Safety Data Sheets prior to product storage or use.

REMARK

Whilst information and/or specification contained herein is to the best of our knowledge true and accurate, and is based on many years experience, we cannot accept any liability either directly or indirectly arising from the use of our products, whether or not in accordance with any advice, specification or recommendation given by us, as we have no direct or continuous control over how or where our products are applied.

LEYDE-PRODUCTS are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale.