

Chemical Reactivity

Magnesium Sulphate / Sodium Sulphate Test Water Bath

UTA-0840

When aggregates have been exposed to weathering action such as thawing cycles and freezing, the Magnesium Sulphate and Sodium Sulphate Tests can be used to determine the soundness of these aggregates. Only the specific products are listed above. Please note that other equipment such as ovens, sieves, balances etc. are also required to perform these tests.

Sodium Sulphate can be used instead of Magnesium Sulphate according to the ASTM standard. When using Sodium Sulphate for testing, the UTGG-2415 Hydrometer 110-1200 g/ml is required. (The temperature of test solution that is in the dipping chamber produced of stainless steel, can be automatically adjusted to the required temperature with the heating and cooling system provided by the UTA-0840.) The water circulation pump makes feedback and can provide homogeneous temperature distribution.

The Magnesium Sulphate / Sodium Sulphate Test Water Bath can be used as a general-purpose water bath when the dipping cabinet is removed from its place.

Alkali Aggregate Reaction Bath

UTA-0880

The Alkali Aggregate Reaction Bath is used to keep 25x25x285 mm samples in NaOH (Sodium Hydroxide) or in any other solution at a specified temperature. The system has a digital temperature controller with 1°C accuracy. The temperature can be regulated between ambient to 100°C by using this controller.

The temperature can also be monitored by placing an external 1°C accuracy PT 100 sensor in the water. The bath is made from stainless steel and has a glass cover and a chamber with a capacity of holding 36 samples. The chamber also has a cover made of stainless steel. A special rack made of polyamide allows the samples to be placed separately from one another, in a vertical position. By removing the special rack, the UTA-0880 Aggregate Reaction Bath can also be used as a general-purpose water bath. When the water level is too low, the electronic water level indicator will sound an alarm.



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About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training. PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.

Other Equipment

PCTE supply three main ranges: NDT, Lab and Geotech Instrumentation.

NDT includes: Rebound Hammers, Covermeters, Ultrasonics, GPR, Corrosion Testing, Coating Testing and Foundation Testing

Lab includes equipment for: Concrete, Cement, Aggregate, Soil, Asphalt and Metal

Geotech Instrumentation includes: Strain Gauges, Piezometers, Inclometers, Extensometers, Tiltmeters, Load Cells and Dataloggers