

AGGREGATE > CHEMICAL PROPERTIES

AGGREGATE SOUNDNESS TEST SET (Magnesium / Sodium Sulfate Soundness Test)

Code: R042



- The Aggregate Soundness Test Set is used to evaluate the resistance of aggregates to weathering by simulating the effects of freeze-thaw cycles through repeated immersion in magnesium or sodium sulfate solutions, followed by oven drying.
- This test is critical for determining the suitability of aggregates for use in concrete, asphalt, and other construction materials, particularly in environments subject to severe weather conditions.
- The testing procedure involves immersing aggregate samples in a saturated sulfate solution for a specified period, drying them to induce salt crystallization within the pores, and repeating this cycle multiple times to assess durability.
- The apparatus includes a corrosion-resistant density basket, a hydrometer for monitoring solution concentration, and a sealed container to maintain solution integrity throughout the testing cycles.
- Optional accessories that should be ordered separately, such as a water bath, are available to regulate solution temperature, ensuring consistent and accurate test conditions in compliance with international



standards.

STANDARDS

ASTM C88 • EN 1367-2 • AASHTO T104

SET

• Density Basket: Ø 120 mm x 160 mm, mesh opening 3.35 mm

• Hydrometer Range: 1.200–1.300 g/mL

• Solution Container: Sealed with lid, suitable for sulfate solutions

ORDERING INFORMATION

Item	Code
AGGREGATE SOUNDNESS TEST SET	R042X00AH
DENSITY / SOUNDNESS BASKET (Ø 120 x 160 mm / Aperture: 3.35 mm)	G100P005H
DENSITY / SOUNDNESS BASKET (Ø 250 x 250 mm / Aperture: 1.00 mm)	G100P004H
DENSITY BASKET (Ø 200 x 200 mm / Aperture: 3.35 mm)	G100P002H
HYDROMETER (1.200 - 1.300 g/ml)	W154G012H
MAGNESIUM SULFATE	G806X00XH
SODIUM SULFATE	G805X00XH
AGGREGATE SOUNDNESS WATER BATH (Magnesium Sulphate Test)	R043X001U