Ring and Ball Test Set

LT-AS0036 | Softening point determination with a glass thermometer

Analog heating • Magnetic stirring • Two-ring specimen assembly



600 ml

GLASS BEAKER VOLUME

110 °C

GLASS THERMOMETER MEASURING LIMIT

EN 1427 • ASTM D36 • AASHTO T53

LT-AS0036

Photographs and Set Components

Glass thermometer, beaker, support assembly and analog heating

The LT-AS0036 is a laboratory set for determining binder softening point by the ring and ball method. Specimen deformation is observed visually; bath temperature is read from the glass thermometer and recorded when the specified position is reached.

GLASS THERMOMETER

The LT-G0182 thermometer allows bath temperature to be monitored up to 110 °C.

SUPPORT ASSEMBLY

Supports positioning of the ring and thermometer arrangement inside the beaker.



ANALOG HEATING

The heated magnetic stirrer supports heating and stirring according to the test method.

600 ml GLASS BEAKER

Contains the bath liquid; transparent construction allows visual observation of the test.



Glass beaker, thermometer and support assembly



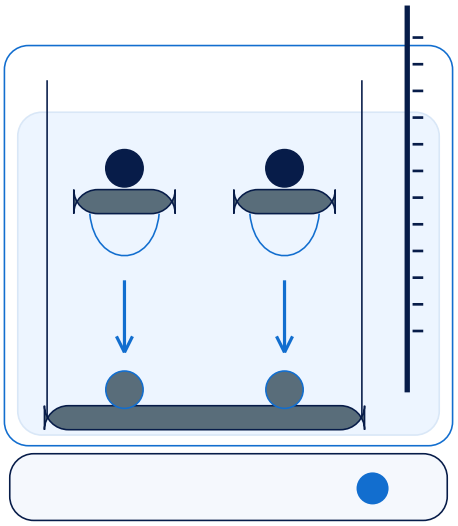
Analog heating control and operating panel

LT-AS0036

Softening Temperature by Visual Observation

Prepare rings • Center balls • Heat • Read temperature

TWO RINGS + STEEL BALLS + THERMOMETER



OBSERVATION: SPECIFIED SPECIMEN DEFORMATION

READING: GLASS THERMOMETER TEMPERATURE

SPECIMEN: BINDER PREPARED IN BRASS RINGS

Record the temperatures of both specimens separately

REPRESENTATIVE RING AND BALL DIAGRAM • NOT TO SCALE

Prepare Rings and Balls

Prepare specimens in both brass rings. Position balls using the centering guides.

Heat the Bath Steadily

Use the appropriate bath liquid. Set heating and stirring according to the method.

Observe and Record Temperature

Watch for the specified specimen and ball position; read the corresponding temperatures.

During heating, the binder in each ring softens and deforms downwards under the steel ball. The operator observes when each specimen reaches the method-defined endpoint and reads the bath temperature at that moment. Evaluate the readings together according to the relevant standard.

Bath Liquid and Heating

Select bath liquid and temperature conditions according to the method and expected softening point. The analog heated magnetic stirrer supports heating and bath circulation.

The LT-G0182 glass thermometer has a measuring limit of 110 °C. Monitor test temperature with this thermometer and visually check specimen position and heating conditions throughout the procedure.

Rings, Guides and Records

The set comprises two brass rings, steel balls, centering guides, 600 ml glass beaker, glass thermometer and analog heated magnetic stirrer.

Keep rings clean and prepare specimens according to the method. Check correct ball centering. Record specimen identification, bath liquid and both observation temperatures in the same test record.

LT-AS0036

Technical Specifications and Set Contents

LT-AS0036 | Ring and ball set and component codes

Technical Specification	Value / Description
Product Code	LT-AS0036
Test Method	Ring and ball • Visual observation and temperature reading
Specimen Assembly	2 brass rings • Steel balls
External Dimensions / Weight	280 × 400 × 200 mm • 4 kg
Relevant Methods	EN 1427 • ASTM D36 • AASHTO T53

Component Code	Description
LT-G0246	Analog hot plate with magnetic stirrer
LT-AS0036/1	Steel ball
LT-AS0036/2	Ball centering guide
LT-AS0036/3	Brass rings • 2 pcs.
LT-G0404	Glass beaker • 600 ml
LT-G0182	Glass thermometer • 110 °C measuring limit

Record Observation Temperatures and Test Conditions

Verify bath liquid, starting conditions and thermometer position. Record the endpoint temperature for each specimen separately and evaluate results according to the relevant standard.

Ring and Ball Test Workflow

01
Prepare
Fill both rings and center the balls.

02
Position
Place the assembly and thermometer in the bath.

03
Heat / Observe
Heat steadily and observe specimen movement.

04
Read / Record
Read temperatures and record the results.

Product Page | liyatest.com.tr/en/urun/ring-and-ball-test-set/