

7.LOSS ON HEATING OF BITUMINOUS MATERIALS.

(IS : 1205 – 1978)

INTRODUCTION:

The loss in weight (exclusive of water) of bituminous materials when heated is called loss on heating of bituminous materials.

Object:

To determine the loss on heating of bituminous materials.

Apparatus:

- a) Oven – heating capacity is minimum 180°C and interior dimensions min.330X330mm.
- b) Aluminum Rotating shelf - the self shall be suspended by vertical shaft and centered with respect to the horizontal interior dimensions minimum diameter of 250mm, and shall be provided with a mechanical means of rotating it at the rate of 5 to 6 rpm.
- c) Thermometer – 0 to 360°C – sensitivity 0.1°C .
- d) Containers- Metal or glass cylindrical containers shall have a flat bottom and diameter 55mm, 35mm depth minimum.
- e) Balance – sensitivity 0.01 gm.

Procedure:

Heat the sample with care, stirring constantly to prevent local overheating, until the sample has become sufficiently fluid to pour. Place the sample in container and cool the sample to room temperature and then weigh to the nearest 0.01gm. Bring the oven to a temperature of 163°C and place the container in oven for period of 5 hr. Remove the sample from the oven, cool to room temperature, and weigh to the nearest 0.01gm. And calculate the loss due to heating.

Limits: Loss on heating of all grades, except A200 & S200 of bitumen is maximum 1% by mass. Loss on heating of grade A200 & S200 is maximum 2% by mass.

LOSS ON HEATING OF ASPHALTIC COMPOUNDS.
(IS : 1212 - 1978)

Frequency of Tests	Permissible Limits
2 Samples / Consignment	Grade 30/40 Grade 60/70 Grade 80/100
	Min. 1 %.

Lab Ref. No : _____

Date of Sampling : _____

Grade of Sample : _____

Date of Testing : _____

SAMPLE NO.	1	2	3	4	5	6	7	8
WEIGHT OF CONTAINER.								
WEIGHT OF SAMPLE BEFORE HEATING.								
WEIGHT OF SAMPLE AFTER HEATING.								
WEIGHT LOSS.								
LOSS ON HEATING (%)								
AVERAGE VALUE.								

Remarks : _____

Tested by : _____
For Contractor

Checked by : _____
For Contractor

For Engineer