

MAURITIAN
STANDARD
MS 93 - Part 1—1988



Specification for
PENETRATION GRADE BITUMENS

PREVIEW

Price: Rs 10.00

FOREWORD

This Mauritian Standard was drawn up by the Building and Construction Standards Committee through its subcommittee on Bitumen and Bituminous Compounds for Road Surfacing and Maintenance and approved by the Standards Council on 11 Aug 88. It was notified in the Government Gazette on 12 Nov 1988.

In preparing this standard, reference was made to the following:

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|----|-------------------|-----|---|
| 1 | SABS 307 | ... | Standard specification for penetration grade bitumens |
| 2 | BS 3690: Part 1 | ... | Specification for bitumens for road purposes |
| 3 | ANSI/ASTM D 5* | ... | Standard test method for penetration of bituminous materials |
| 4 | ANSI/ASTM D 36 | ... | Standard test method for softening point of bitumen (Ring and ball apparatus) |
| 5 | ANSI/ASTM D 92* | ... | Standard test method for flash and fire points by Cleveland open cup |
| 6 | ANSI/ASTM D 113 | ... | Standard test method for ductility of bituminous materials |
| 7 | ANSI/ASTM D 140* | ... | Standard methods of sampling bituminous materials |
| 8 | ANSI/ASTM D 1754 | ... | Standard test method for effect of heat and air on asphaltic materials (thin-film oven test) |
| 9 | ANSI/ASTM D 2042 | ... | Standard test method for solubility of asphalt material in trichloroethylene |
| 10 | ANSI/ASTM D 2170* | ... | Standard test method for kinematic viscosity of asphalts (Bitumens) |
| 11 | ANSI/ASTM D 2872 | ... | Standard test method for effect of heat and air on a moving film of asphalt (Rolling thin-film oven test) |
| 12 | NF T 65-001 | ... | Liants hydrocarbonés — Bitumes purs — Specifications |
| 13 | NF T 66-004 | ... | Pénétrabilité à l'aiguille des produits bitumineux |
| 14 | NF T 66-006* | ... | Détermination de la ductilité des produits bitumineux |
| 15 | NF T 66-007* | ... | Détermination de la densité relative des produits bitumineux — Methode de pycnometre |
| 16 | NF T 66-008* | ... | Détermination du point de ramolissement des produits bitumineux — Methode bille et anneau |
| 17 | NF T 66-011* | ... | Détermination des pertes de masse au chauffage des produits bitumineux |
| 18 | NF T 66-012* | ... | Solubilité des produits bitumineux |
| 19 | NF T 66-015* | ... | Produits noirs — Determination de la teneur en parafine des bitumes routiers |

*Documents referred to in this standard.

Acknowledgement is made for the use of information from the above publications.

BITUMENS AND BITUMINOUS COMPOUNDS FOR ROAD SURFACING AND MAINTENANCE

PART 1 — SPECIFICATION FOR PENETRATION GRADE BITUMENS

1 SCOPE

1.1 This part of this standard specifies the requirements for penetration grade bitumen which are suitable for use in road construction and maintenance.

2 DEFINITIONS

For the purpose of this standard the following definitions apply.

2.1 *Bitumen*: A viscous liquid, or a solid, consisting essentially of hydrocarbons and their derivatives, which is soluble in carbon disulphide and trichloroethylene. It is substantially non-volatile and softens gradually when heated and is obtained by refinery processes from petroleum. It is black in colour and possesses waterproofing and adhesive properties.

2.2 *Lot*: That quantity of penetration grade bitumen of the same batch identification, from one manufacturer, submitted at any one time for inspection and testing.

3 REQUIREMENTS

3.1 General

The penetration grade bitumen shall be homogenous and free from visible water, from mineral matter, and from other impurities and shall not foam when heated to application temperature.

3.2 Grade requirements

The bitumen shall comply with the requirements given in the table, relevant to the grade specified by the purchaser.

NOTE — When so required by the purchaser, the supplier shall indicate the kinematic viscosity (determined in accordance with ASTM method D 2170) of the bitumen, to serve as a guide to the purchaser when the optimum application temperature for the grade concerned is determined.

4 SAMPLING AND COMPLIANCE WITH THE STANDARD

4.1 Sampling

The relevant sampling procedure described in ASTM D 149 shall be applied in determining whether a lot complies with the appropriate requirements of the standard.

4.2 Compliance

The lot shall be deemed to comply with the requirements of the standard if, after inspection and testing, the sample taken in accordance with 4.1 is found to comply with all the appropriate requirements of the standard.