

# **SPECIFICATION FOR MASTIC MATERIALS**

Revised on 08-11-2017

## General Requirement

“Mastic” is a cold applied, self-applied, self-supporting material for sealing, filling and caulking application where a protective, waterproof and non-setting material is required. Profiling mastic shall not contain volatile organic compounds and shall be self supporting and non cracking. Mastic should remain permanently plastic while being impervious to moisture. This shall be highly resistant to mineral acid, alkalis, salts and mechanical stress over a wide temperature range. Mastic shall be suitable for application in a wide range of climatic conditions. It is specially recommended around pipes to prevent the water seeping through the joint. This is used for moulding around irregular profiles such as flanges, mechanical joints, and valves to provide a contour suitable for wrapping with anti-corrosion tapes.

### Technical Properties :

Properties of Primer, Mastic Paste and Mastic Tape shall be as given below.

#### Mastic Primer

TYPICAL PROPERTIES	DATA
Specific Gravity	>1 g/cm <sup>3</sup>
Flash Point	>100 <sup>0</sup> c

#### Mastic Paste

TYPICAL PROPERTIES	DATA
Specific Gravity	More than 1.1 g/cm <sup>3</sup>
Specific Volume	Less than 730cm <sup>3</sup> /kg
Flash Point	180 <sup>0</sup> c
Maximum Service Temperature	70 <sup>0</sup> C
Solid content	98% or more

#### Mastic Tape

TYPICAL PROPERTIES	DATA
Flash Point	>160 <sup>0</sup> c
Maximum Service Temperature	>70 <sup>0</sup> C

## **Application**

The following procedure shall be applied for the protection of flanged joints.

1. Pipe joints and adjacent area of pipe shall be cleaned and all loose scale rust and dirt, etc removed before protection materials are applied.
2. The application of continuous coating of petroleum paste over the whole area to be protected as a primer, including bolt heads, nuts, flanges etc.
3. Where bolt heads, nuts, flanges and other projections arises, profiling mastic shall used to give a smooth external profile.
4. Flange joint including Bolt heads, nuts, flanges and other projections and hollows shall be filled with a profiling mastic to give a smooth external profile to suit the smooth wrapping.
5. The joint shall be spirally wrapped with a self adhesive protective tape. Minimum application shall be a spiral wrap with 55% overlap. Care should be taken to ensure that tape is in contact with the under laying surface to prevent wrinklers or air pockets. On flanges, couplings and fittings, wrapping should be on reducing diameter/ circumference. The tape shall extent minimum of 150mm along the barrel of the pipe on each side of the joint and finished smooth so that no water shall seep through the wrapping.