



Exploration & Production

GENERAL SPECIFICATION

CORROSION

GS EP COR 226

**Materials for thermal insulation of pipeline, piping
and subsea components**

03	01/2012	General review, modification of acceptance test criteria for aging and field joint adhesion, test temperature amendment
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1. Scope

This GS covers:

- Integral External Insulation (IEI) where the insulation is bonded to the outer surface of a structure or to a corrosion protective layer on the outer surface of a structure
- Insulation Modules (IM) which consists of a discrete pre-formed component attached onto the structure to be installed.

Pipe in pipe, active systems and internal insulation systems are not covered by this document.

This GS has been developed on the basis of known materials (elastomers, PU, PP, epoxy, in solid, blown foam, syntactic and composite syntactic foam). It can be used for qualification of other materials. In that case, additional (or different) requirements and/or data might be needed, based on Company approval.

Materials concerned by this GS are typically used for the insulation of the following:

- Pipe lines
- Steel flowlines and risers, including riser tower
- Subsea components such as wellheads, christmas trees, manifold and jumpers.

2. Reference documents

The reference documents listed below form an integral part of this General Specification. Unless otherwise stipulated, the applicable version of these documents, including relevant appendices and supplements, is the latest revision published at the EFFECTIVE DATE of the CONTRACT.

Standards

Reference	Title
ASTM D 3045	Standard Practice for Heat Aging of Plastics without Load
ASTM G 8	Test method for cathodic disbonding of pipe line coating
ISO 62	Test method for water absorption of plastics
ISO 178	Plastics-Determination of flexural properties of rigid plastics
ISO 527	Plastics-Determination of tensile properties
ISO 844	Rigid cellular plastics-determination of compression properties
ISO 868	Test method for hardness measurements of plastics
ISO 1183	Plastics-Test method for determining the density and relative density of non-cellular plastics
ISO 4892 (Parts 1; 2)	Plastics-Methods of exposure to laboratory light sources - (Parts 1; 2)
ISO 8302	Thermal insulation-Determination of steady state thermal resistance and related properties-Guarded hot plate apparatus
ISO 11357-4	Test method for determination of specific heat capacity by differential scanning calorimetry