

## Petroleum products and lubricants / Mineral oils and other liquids

### Determination of corrosion protection properties in the presence of water

#### Scope

This International Standard describes a procedure for evaluating mineral oils and other liquids that indicates how effective they are in avoiding the rusting of parts of iron when the oil or liquid is mixed with water. The method is used for inhibited mineral oils including steam turbines, oils, circulating oils, hydraulic oils and non-hydrocarbon fluids, including those with a higher density than water.

In many cases, such as steam turbine gearboxes, the lubricating oil can be mixed with water, possibly with rusting iron parts. This test method determines the effectiveness of which inhibited mineral oils help prevent this type of rusting.

#### Brief description

A mixture of 300 ml of the oil or liquid to be tested and 30 ml of distilled water or artificial seawater, as required, shall be stirred at a temperature of 60 °C with a cylindrical steel specimen completely immersed therein. The test is usually carried out over 24 hours.

However, the duration of the test may be shorter or longer at the discretion of the interested parties. The impactor shall then be tested for signs of rust and the degree of corrosion.



**DMT GmbH & Co. KG**

Tremoniastraße 13

44137 Dortmund

Tel +49 231-5333-240

Fax +49 231-5333-299

[www.dmt-group.com](http://www.dmt-group.com) · [aps@dm-group.com](mailto:aps@dm-group.com)

