

**BS 6580:2010**



**BSI Standards Publication**

# **Specification for corrosion inhibiting, engine coolant concentrate (“antifreeze”)**

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## Foreword

### Publishing information

This British Standard is published by BSI and came into effect on 31 March 2010. It was prepared by Technical Committee I/-, *Miscellaneous standards materials and chemicals*. A list of organizations represented on this committee can be obtained on request to its secretary.

### Supersession

This British Standard supersedes BS 6580:1992+A1:1993, which is withdrawn.

### Information about this document

This is a full revision of the standard, which removes references to British Standards methods that are unsupported by a Technical Committee at this time, and replace them with references to American Society for Testing and Materials (ASTM) standards.

This British Standard comprises a performance specification for corrosion inhibiting, coolant concentrates based on diols for use in the cooling systems of all types of liquid-cooled internal combustion engine. It is intended to apply to products based on ethanediol (ethylene glycol) and propane-1,2-diol (propylene glycol) but products containing other diols or polyols such as digol (2,2'-oxydiethanol) or glycerol (1, 2, 3-propane triol) are not excluded.

Traditionally the term "antifreeze" has been used to describe the concentrate which is added to the water in the cooling system of an internal combustion engine. However, this term takes into account only the frost-protective role of the product, so implying that its use is a seasonal requirement, and ignores its function as a heat exchange medium which is designed to protect the cooling system of the engine from corrosion and damage under all operating conditions. The term "engine coolant concentrate" embraces all these requirements and is preferred. For the purposes of this standard, the engine coolant concentrate is generally referred to as "the product".

Although not comprehensive, this specification ought to help to prevent the marketing of those products which are likely to cause significant damage to the cooling system, either from lack of frost protection or by corrosion. However, although a product might conform with the requirements of this specification, it is also most important, for a particular engine, that careful note be taken of any special requirements indicated by the engine manufacturer.

Note further that product formulations conforming with this specification are not necessarily compatible with each other.

### Product certification

Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing product surveillance, which may be coupled with assessment of a supplier's quality systems against BS EN ISO 9001.