

OXYGEN NUMBER

METHOD NUMBERS: IDFB-7, JIS L 1903, EN 1162, GB/T 10288-2003, GB/T 14272, KS K 0820, CNS 13982-7 L3253-7, AS 4823.2



Oxygen Titrimeter

■ WHAT IS IT?

Oxygen Number indicates product cleanliness by providing a measurement of organic material coating the fill material.

■ HOW IS IT DONE?

A set amount of fill material to be tested is placed in a tumbler jar with distilled water and agitated for a set amount of time. The fill material is then filtered out leaving the loosened particles in the water. Sulphuric acid is added and the resulting solution is titrated with potassium permanganate until the solution remains pink for 60 seconds. The oxygen number is calculated from the amount of potassium permanganate added, and is reported as mg of oxygen per 100 g of sample.

■ WHAT DO THE NUMBERS MEAN?

The lower the Oxygen Number the cleaner the fill material. Most countries require the Oxygen Number to be less than 10.

For a product to be labeled hypoallergenic in the USA, the Oxygen Number must be 4.8 or less.

■ WHY DO IT?

Governments require that products meet certain cleanliness requirements.

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