

Flash Point Tests in the Flavours & Fragrances Industry

Flash point testing of aroma products containing alcohol based solvents is important because the ingredients of many fragrance and flavouring products are manufactured from alcohol or other organic solvent chemicals which are flammable. Transportation of these products requires the manufacturer to classify their flammability for compliance with transport safety regulations.

In addition the raw materials used in the manufacture of products can be tested to ensure their flash point meets the required safety classification criteria, this is especially true of gel waxes used in the production of candles.

The volatility or 'flash-off' of flavourings can result in significant flavour loss. Flavours with low flash point components, like the esters that characterise many fruits, tend to volatilise more readily than others. Testing for flash point allows the formulation of many flavours, especially those used in the confectionary industry, to withstand designated heat levels without significant flavour loss.



Setaflash - the preferred test method

Speciality fragrance and flavourings are typically produced in very small volumes requiring costly processes and materials so the commercial value of the test sample is very important.

The Setaflash instrument requires just 2ml of sample which enables the target temperature to be reached quickly, typically within 1-2 minutes. Many traditional flash point tests require a much larger volume of sample (typically 70-80ml) and also take 30 minutes or longer to perform, so most operators opt for the Setaflash

Small Scale Closed Cup test - ASTM D3828 which is fully specified for flash point testing of flavours and fragrances.

The Setaflash instrument is a simple and cost effective test that can be undertaken on-site with minimum operator skill. Results ensure that a product complies with transport safety regulations as well as assisting with the formulation of key ingredients. The small sample volume minimises odours and reduces the wastage costs of testing for flash point.

Further information about Setaflash small scale flash point testing can be found at www.stanhope-seta.co.uk/small-scale-flashpoint-testing.asp or by scanning the QR code below.

