Flash Point: Essential Oils, Flavours & Fragrances - market guide

Why measure the flash point of essential oils, flavours and fragrances?

- To classify material to ensure it is handled, stored, transported and disposed of correctly
- This is communicated through the Classification, Labelling and Packaging Regulation (CLP) in Europe and the United Nations Globally Harmonised System (GHS) worldwide
- A series of pictograms are used to identify a product by type and packing group

Symbol			
Hazard	Extremely	Highly	Flammable
statement	flammable	flammable	
Category	Flash point	Flash point	Flash point
	of <23 °C,	of <23 °C,	of >23 °C,
	boiling point	boiling point	boiling point
	<35 °C	≥35 °C	≤60 °C

- Applicable to all modes of transport and governed by relevant legislative bodies, whether by air (IATA), rail (COTIF), road (ADR) or maritime (IMDG)
- The lower the flash point, the greater the risk
- A change in flash point may indicate the presence of potentially dangerous volatile contaminants or the adulteration of one product by another



Which products are controlled?

- Cosmetic products often contain numerous ingredients, it is the manufacturer's responsibility to measure their flammability/ hazardous nature
- Perfumes, essential oils, dyes and scented cosmetics all fall under the category of cosmetic products which must be tested for their flash point
- Essential oils and aromas are used in a wide variety of applications from aromatherapy, food and flavourings to domestic cleaning and pesticides and must be tested

What are the implications of CLP non-compliance?

- It is a criminal offence to fail to comply with CLP regulations which can result in fines and/ or imprisonment
- The maximum civil penalty for violation of hazardous materials transportation law can reach tens of thousands of dollars
- For violation that results in death, serious illness, severe injury or substantial property damage, the civil penalty can reach hundreds of thousands of dollars

How does Setaflash help?

 Speciality fragrance and flavourings are typically produced in very small volumes requiring costly processes and materials, this means the commercial value of the test is very important



- Setaflash requires just 2 ml of sample and a test takes under 2 minutes, reducing waste
- Tests can be carried out onsite rather than sending samples to a test house, saving time and money