



DATASHEET

E-Liquid - The Right Testing Package for Independent Verification

For those manufacturing e-liquids, why not get a level of independent verification from the process safety experts at DEKRA? From our labs in Southampton, our experts can perform the necessary tests required to provide you with data in a range of areas, including:

pH Test

A measure of the acidity or alkalinity of a fluid. The pH of any fluid is the measure of its hydrogen ion (H⁺) concentration relative to that of a given standard solution. The pH is measured on a logarithmic scale ranging from 0 to 14, where 0 is most acid, 14 most basic, and 7 is neutral.

The pH will indicate the nicotine concentration levels of the e-liquid. The results of the test can also be used to complete safety data sheets (SDS). The SDS serves as a primary means of communication along the production and supply chain and contains all important information on hazardous substances; this is required in accordance with REACH and CLP Regulations in the classification, labelling, packaging and transportation of hazardous substances.





Viscosity Test

Resistance of a liquid to a change in shape, or movement of neighbouring portions relative to one another (flow). Viscosity data is used to assess the impact of liquids and/or their components on the safety of humans, the environment, and during transport. We are able to determine both the kinematic and dynamic viscosity in accordance with OECD TG 114.

This test may be required to select the appropriate Flash Point method; furthermore, as with the pH test, results can also be used to complete the SDS in accordance with REACH and CLP Regulations.

Flash Point Test

Flash Point – The flash point of a liquid is the lowest temperature at which sufficient vapor is evolved to form a flammable mixture in air at standard atmospheric pressure. The flash point provides a simple, convenient index for assessing the flammability of a wide variety of materials.

This test is also necessary to classify e-liquids for flammability to meet Process Safety, Transportation and Classification, Labelling and Packaging requirements in accordance with UN Transportation, REACH and CLP.

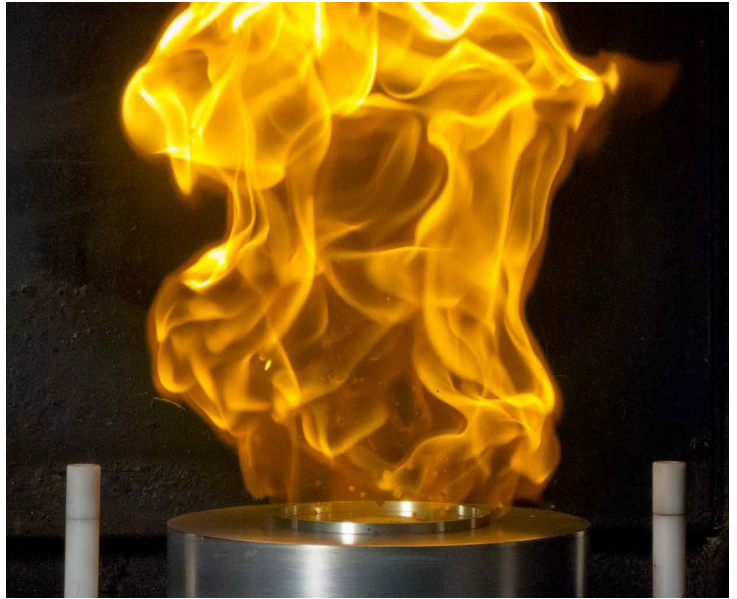


Sustained Combustibility Test

Used to determine, if a substance sustains when heated under the test conditions and exposed to a flame. We perform the sustained combustibility test according to the "United Nations Recommendations on the Transport of Dangerous Goods", Manual of Tests and Criteria, 7th Revised Edition. In conjunction with Flash Point test, this test may be required to appropriately classify an e-liquid.

DEKRA's Global Testing Capabilities

DEKRA has been a principal provider of specialist services for the prevention and control of fires, explosions, and accidental chemical releases in the chemical and process industries since 1986. The safe operation of facilities in chemical and process industries requires solid safety management programs and systems, proficiency (competency, know-how, experience) among the staff and a culture that encourages excellence in process safety practice. Of course, management systems created, and skills developed need to be suitable and correctly applied. They also need to be monitored and must be embedded and sustainable in the long term. Doing these things well will create process safety excellence and generate wealth for all stakeholders involved. Through our consulting and training services, and laboratory testing facilities in North America, Europe, and Asia Pacific, we have been helping our clients achieve process safety excellence.



DEKRA has state of the art ISO and GLP accredited dust explosion, gas and vapor flammability, and electrostatic testing laboratories and specialist facilities for the evaluation of thermal runaway reactions and energetic materials (pyrotechnics, propellants, explosives).

We hope that you have found this guide informative and helped broaden your understanding of how we help our customers select the most appropriate packages for their needs. For more details on our data selection services, or any of our other products, please get in touch using the information below.

Would you like to get more information?

[Contact Us](#)

DEKRA Organisational & Process Safety

DEKRA Organisational and Process Safety are a behavioural change and process safety consultancy company. Working in collaboration with our clients, our approach is to assess the process safety and influence the safety culture with the aim of 'making a difference'.

In terms of behavioural change, we deliver the skills, methods, and motivation to change leadership attitudes, behaviours and decision-making among employees; supporting our clients in creating a culture of care and measurable sustainable improvement of safety outcomes is our goal.

The breadth and depth of expertise in process safety makes us globally recognised specialists and trusted advisors. We help our clients to understand and evaluate their risks, and work together to develop pragmatic solutions. Our value-adding and practical approach integrates specialist process safety management, engineering and testing. We seek to educate and grow client competence to vide sustainable performance improvement; partnering with our clients we combine technical expertise with a passion for life preservation, harm reduction and asset protection.

We are a service unit of DEKRA SE, a global leader in safety since 1925 with over 45,000 employees in 60 countries and 5 continent. As a part of the world's leading expert organisation DEKRA, we are the global partner for a safe world. We have offices throughout North America, Europe, and Asia.

For more information, visit www.dekra-uk.co.uk/en/dekra-organisational-and-process-safety/

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