

CERTIFICATE OF CALIBRATION
ISO 17025 / ISO 17034 FLASH POINT CERTIFIED REFERENCE STANDARD
PENSKY-MARTENS CLOSED CUP ASTM D93, PROCEDURE A

Product Code: **CRMU-PMCC-LOW**

Lot Number: **2231703**

Issue Date:

Expiry Date:

Certified Value: **78.5 °C +/- 1.0 °C**

Certificate No.: **4769**

*CRM Limit: **+/- 3.9 °C**

Uncertainties

The reported uncertainty is based on a combined standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

***PMCC Flash Point, ASTM D93**

The CRM Limit quoted for the flash point standard has been calculated in accordance with ASTM D93.

Certification Procedure

The parent batch for this sample was manufactured, packaged and stored in accordance with the company's accreditation to ISO 17034. The certified values quoted are the mean results calculated from tests conducted by a statistically significant number of laboratories.

Definitions

Flash Point: The lowest temperature corrected to a barometric pressure of 101.3 kPa (760 mm Hg), at which application of an ignition source causes the vapours of a specimen of the sample to ignite under specified conditions of test:

Correction for Barometric pressure: When the pressure differs from 101.3 kPa (760 mm Hg) the flash point can be corrected as follows:

$$\begin{aligned}\text{Corrected Flash Point} &= C + 0.25(101.3 - K) \\ \text{or Corrected Flash Point} &= F + 0.06(760 - P) \\ \text{or Corrected Flash Point} &= C + 0.033(760 - P)\end{aligned}$$

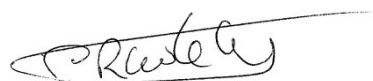
where:

C = observed flash point, °C,
 F = observed flash point, °F,

P = ambient barometric pressure, mm Hg,
 K = ambient barometric pressure, kPa,

Recommendations for use

This product is intended to be used for the annual verification of the accuracy of an instrument and/or procedure as specified in ASTM D93, Procedure A. The shelf life of this product is guaranteed until the expiry date, provided the bottle is unopened and stored between 5 °C to 30 °C. This product has been produced according to in-house procedures and its homogeneity is guaranteed to be fit for purpose when used with a sample size appropriate for the intended measurement method.



Approved Signatory, Mr. P. Whitehurst, Technical Director

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service (UKAS). It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory (NPL) or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory. UKAS is one of the signatories to the Multilateral Agreement of European co-operation for Accreditation (EA) for the mutual recognition of calibration certificates issued by accredited laboratories.



SAMPLE