CIPAC MT STATUS REPORT

29.08.2023

MT 201 Discharge Rate of Trigger Dispenser

Allocated to DAPF

CIPAC methods published in:

Not published

CIPAC 62nd meeting, June 2018 in Panama City

Discharge Rate of Trigger Sprayers including clogging by Mr Oliver Gutsche (5152)
Mr Gutsche presented on behalf of DAPF the results of a validation study for the discharge rate (DR) of trigger sprayers (unknown CIPAC classification). The purpose of the developed method was to evaluate whether trigger sprayers are fit for use.
Based on preliminary experiments a draft method was proposed. After preparation of the sprayer (thorough shaking followed by as many strokes as are needed until the product is expelled followed by an additional five strokes) the bottle is weighed, perform ten full strokes and weigh the bottle again. Repeat this procedure two times resulting in four weightings per sprayer. Calculate the DR per ten full strokes and calculate the average DR based on the three individual DRs.
Eight participants received three trigger sprayers. All trigger sprayers were tested with the standard procedure whereas the third trigger sprayer was also tested at 60% and 20% of the total volume.
Overall 3x8x5 = 120 results were obtained resulting in a mean RSDR of 0.26% proving that the method was fit for purpose and a draft MT method was proposed.

Closed meeting:
Mr Hänel remarked that the trial was only validated by DAPF and therefore was not compliant to CIPAC guidelines. Mr Garvey replied that the remark of Mr Hänel was correct but that the method will only be applied within "DAPF-territory". Mr Hänel will contact DAPF for clarification about their intentions.
Mr Hänel clarified with the head of DAPF that the intention of DAPF was not to get provisional status. Consequently, the decision was that CIPAC full trials are recommended.

CIPAC 66th meeting, June 2022 Virtual

Discharge rate of trigger sprayer by Ms Claudia Vinke (5152, 5319)

Ms Vinke presented the results of a full scale collaborative trial for the determination of the discharge rate of two different types of trigger dispensers with 10 participants. One trigger dispenser was equipped with a press button whereas the other trigger dispenser was equipped with a hand trigger. The test was performed by pushing (or triggering) ten times and weighing the can before and after the described motions, and to repeat this three times with each trigger dispenser. For the push button dispenser eight laboratories determined discharge rates between 0.20 to 0.22 g/stroke and two laboratories determined discharge rates of approximately 0.16 g/stroke. For the hand trigger dispenser ten laboratories determined discharge rates between 1.09 to 1.25 g/stroke (after a repeated trial by laboratory five).

Ms Vinke recommended this method to be accepted as a provisional CIPAC method.

The following comments were received from the meeting:

- Ms Tessier remarked that both products were very different from each other and that the press button trigger dispenser was very similar to an aerosol dispenser.

Closed meeting:

Mr Wiese remarked that there are a lot of formulations which are a kind of devices. The method can be promoted to a **provisional CIPAC method**.

CIPAC 67th meeting, June 2023 Braunschweig

Decision:

At the previous meeting, the method was accepted as provisional. No further comments were received. The method can be promoted to a **full** CIPAC method with the editorial changes and with the remark that MT 178.3 supersedes MT 178 and MT 178.2.