

CIPAC MT STATUS REPORT

29.08.2023

MT 36 Emulsion characteristics of emulsifiable concentrates

Allocated to DAPF

CIPAC methods published in:

CIPAC F, p. 108

CIPAC K, p. 137

CIPAC 43rd meeting, June 1999 in Budapest

Mr Menschel presented a paper with proposals for amendments of CIPAC MT 36. The applicability of the method should be extended to EW's, the test concentration should be reduced to reflect more real field conditions and with regard to the prescribed test temperature of 30°C alternative temperature should be allowed. With regard to the glassware used some discussions arose whether the use of conical glass tubes instead of measuring cylinders were acceptable.

A collaborative study will be organised by DAPF.

CIPAC 44th meeting, June 2000 in Granada

Mr Menschel presented a report, CIPAC/4196, of a CIPAC study on a method for the determination of the emulsion characteristics of EC and EW formulations. 42 laboratories participated. The method is an extension of MT 36.1 to EW's. The results were very satisfying. Mr Hill remarked that the head space of the cylinder should not be less than 30 ml.

Decision The method for the determination of the emulsion characteristics of EC and EW formulations, CIPAC/4195, has been accepted as full CIPAC method (MT 36.3).

CIPAC 67th meeting, June 2023 Braunschweig

MT 36.3. Emulsion stability and re-emulsification by Mr Paolo Grassi (5361)

Mr Grassi presented a proposal to supersede MT 36.3 by a new proposal (to be registered as 36.4). The revision is intended to give better indications on the evaluation of initial emulsification and emulsion stability and is harmonised with similar methods regarding the stability of formulations in water. In the proposal the single inversion is omitted and a more specific description of the visual interpretation is given. Furthermore, the two hour waiting period is mandatory and the other waiting periods will only be needed when the two hour waiting period results in an out of specification determination. The temperature is changed from 30 ± 2 °C to 25 ± 5 °C.

The following comments were received from the meeting:

- Ms Tessier asked why the 0.5 hour waiting period has to be removed. Mr Grassi replied that it will be optional and the 2 hours waiting period will be mandatory and that the current procedure is complicated and that a simplification is needed.
- Mr Pigeon remarked that in the actual proposal CIPAC water D is mentioned, however it might be useful to specify two types of water. Mr Grassi suggested that it might be better to say to use any type of water or what the authority requests.
- Mr Dubois remarked that both conical flasks and emulsion tubes are mentioned. However, they differ considerably in appearance and will lead to different interpretations of the emulsion stability. Mr Grassi answered that this is why it is considered optional, to be used for development, as it is not possible to compare the results.
- Ms Breedt asked whether conical flasks as emulsion tubes were tested and compared. This was not the case. She also asked if the flasks cannot be inverted 30 times? The answer was that the change from 1 to 30 would be too big.

Closed Meeting:

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Mrs Tessier had concerns about the proposed method. It is not up to the CIPAC method to decide whether or not a time point is necessary. Regulatory authorities can decide whether this time point (30 min) is needed or not but it should be included in the test method. Also in the FAO manual in chapter 4.5.45 the description of the Emulsifiability clause still states after 0.5 hrs as a result that needs reporting. The use of the graduated tubes – this is given as optional but the discussion in the meeting indicated that inversion procedure was different using these tubes – this needs further consideration.

Mr Plumb mentioned that oil was not mentioned anymore in the new proposal as was the possibility of adding a colourant to enhance the visibility. A good justification as to why this is not needed anymore is needed. Mr Pigeon remarked that the type of water should be clearly defined as there are differences between the use of types of water between the FAO/WHO method and the proposed CIPAC method.

Mr Hänel remarked that further explanation from DAPF is required before a decision can be made.