**INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEx SYSTEM)**

**Title: Compilation of Comments and observations on** **ExTAG/675A/CD –** **Draft ExTAG Decision Sheet – The test sample used for the dielectric strength test on the compound.**

**Circulated to: ExTAG – IECEx Testing and Assessment Group**

**INTRODUCTION**

This document contains the compilation of comments, as well as observations, from the originators NEPSI, CN, received on ExTAG/675A/CD – Draft ExTAG Decision Sheet – The test sample used for the dielectric strength test on the compound and has been prepared for consideration during the 2022 ExTAG Remote Meeting

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**ExTAG Secretariat**

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| **ExCB/**  **ExTL** | **Clause/ Sub-clause** | **Paragraph Figure/**  **Table** | **Type of**  **comment**  **General/**  **technical/**  **editorial** | **COMMENTS** | **Proposed change** | **Observation**  **(to be completed by the originator)** |
| --- | --- | --- | --- | --- | --- | --- |
| **CNEX-Global BV** | **-** | **-** | **t** | **We disagree with this DS, because this DS would significantly change the accepted test method as written in the current standard text.**  The current standard text is clear in specifying sample dimensions for both clauses 8.1.1 and 8.1.2.  The clauses are described as separate tests in the current standard text, and thus the sample for 8.1.2 need not be one of the three samples from 8.1.1.  **Technically, we would agree that it would be best to have both tests done in series, using the sample with the highest weight increase for the dielectric strength test.**  The now changed text proposal is in fact technically worse, because it now leaves it to the manufacturer to decide if he wants the samples correctly (same samples used for both tests), or choose the easy-way-out (different samples for different tests).    However, this text change needs to be decided in the  MT 60079-18, not as DS. | **Have MT60079-18 change the text in IEC 60079-18 cl. 8.1.2 as follows:**  The sample shall be circular with a diameter of 50 mm ± 1 mm and a thickness of  3 mm ± 0,2 mm. **Following the water absorption test in cl. 8.1.1, the sample with the highest weight increase shall be used for the dielectric strength test.**  The sample shall be symmetrically placed between electrodes 30 mm ± 1 mm  in diameter, within a temperature controlled oven, set to achieve the maximum service  temperature of the compound.  A voltage of 4 kV r.m.s. 50  + % and with frequency between 48 Hz and 62 Hz shall be applied  for not less than 5 min. No flashover or breakdown shall occur during the test. | Thanks for the comments, however the comments will lead the situation to a complex way.  The real intention of this DS is to provide an alternative number of the samples for these 2 tests based on the consensus of both ExTL and manufacturer. |
| **DEKRA / BVS**  **DE** |  |  |  | **We are in favour with the answer given in the proposed DS.** |  | Noted with thanks. |
| **DNV**  **NO** |  |  | General | We agree in ExTAG/675A/CD |  | Noted with thanks. |
| **FIDITAS**  **HR** | **-** | **-** | **T** | **Fiditas does not support Decision Sheet ExTAG/675A/CD.**  **Fiditas consider that the ExTAG DS is not necessary, text given in the standard is clear.** | **Withdrawal of ExTAG DS proposal** | Thanks for the comments.  The real intention of this DS is to provide an alternative number of the samples for these 2 tests based on the consensus of both ExTL and manufacturer. |
| **FTZU**  **CZ** |  |  | **G** | **We agree with this draft ExTAG Decision Sheet.** |  | Noted with thanks. |
| **ITL**  **IL** |  | **ExTAG/675A/CD** | **Editorial** | **Unless unit is intended to immersed in water during regular operation, we recommend to wait at least 24 h before applying Electric strength test** | **Add - Unless unit is intended to immersed in water during regular operation, it is recommend to wait at least 24 h before applying Electric strength test** | Thanks for the comments.  Since the samples shall be wiped dry after immersing in water during the water absorption test, it seems not necessary to wait for 24h. |
| **NANIO CCVE (RU)**  **ExCB/**  **ExTL** |  |  | **General** | **We support DS ExTAG/675A/CD without any comments.** |  | Noted with thanks. |
| **NCC**  **BR** | **8.1.1**  **8.1.2** |  |  | **We agree** |  | Noted with thanks. |
| **NEPSI**  **CN** |  |  | **G** | **We support the draft decision sheet ExTAG/675A/CD.** |  | Noted with thanks. |
| **PTB**  **DE** |  |  |  | **PTB disagrees with the suggested answer.**  **PTB has the opinion that each test shall be performed with unstressed test samples. Compared to tests performed individually, the combination of tests on the same specimen may lead to incorrect results, which could be in some cases more critical from a safety point of view.** | **Change answer to No** | Thanks for the comments.  From the safety point of view, the test condition will be more severe if we carry out both tests on same samples, however from the cost-effective point of view, this could be accepted if ExTL and manufacturer can reach a consensus. |
| **QPS CA** |  |  |  | **QPS has no objections with the ExTAG as proposed.** |  | Noted with thanks. |
| **Simtars**  **AU** |  |  |  | **Simtars has no comments.** |  | Noted with thanks. |
| **TC31** |  |  | **ge** | Support DS as drafted | None | Noted with thanks. |
| **TIIS**  **JP** |  |  | ge | We support the revised draft DS without comments. |  | Noted with thanks. |
| **TUVR**  **DE** |  |  |  | **No additional comments from TÜV Rheinland. We agree.** |  | Noted with thanks. |
| **UL LLC USA** |  |  |  | **UL-USA supports the revised version of the draft decision sheet 675A/CD.** |  | Noted with thanks. |