Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: North America
Global Technical Committee: Liquid Chemicals
TC Chapter Cochairs: Don Hadder (INTEL), Laura Ledenbach (Peroxy Chemicals), Steve Rogers (KMG Chemicals), Koh Murai (MegaFluid Systems)

Standards Staff: Inna Skvortsova

<table>
<thead>
<tr>
<th>Scheduled in Background Statement</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>11/05/2019</td>
</tr>
<tr>
<td>Location</td>
<td>SEMI HQ, Milpitas CA</td>
</tr>
<tr>
<td>Reason for Change of Date and/or Location (if changed)</td>
<td></td>
</tr>
</tbody>
</table>

Note: See Regulations ¶ 9.5 Exceptions for allowable reason to change.

I. Document Number and Title

<table>
<thead>
<tr>
<th>Document Number</th>
<th>Document Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>6195A</td>
<td>Revision to SEMI F104-0312 PARTICLE TEST METHOD FOR EVALUATION OF COMPONENTS USED IN ULTRAPURE WATER AND LIQUID CHEMICAL DISTRIBUTION SYSTEMS with title change to: TEST METHOD FOR EVALUATION OF PARTICLE CONTRIBUTION OF COMPONENTS USED IN ULTRAPURE WATER AND LIQUID CHEMICAL DISTRIBUTION SYSTEMS</td>
</tr>
</tbody>
</table>

II. Tally

Standards staff to fill in.

Voting Tally: As-cast tally after close of voting period

Note: A minimum of 60% of the Voting Interests that have TC Members within the global technical committee that issued the Letter Ballot must return Votes. (Regulations ¶ 9.6.2.1.1)
Voting Tally (with example values):

<table>
<thead>
<tr>
<th>Voting Interest: Return Rate</th>
<th>Returned Votes</th>
<th>Distribution</th>
<th>Return Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter Ballot</td>
<td>69</td>
<td>113</td>
<td>61.1%</td>
</tr>
<tr>
<td>Intercommittee Ballot</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voting Interest Reject(s)</td>
<td>0</td>
<td>Total Voters with Rejects</td>
<td>0</td>
</tr>
<tr>
<td>Voting Interest Accept(s)</td>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: See Regulations § 3.2.1 for definition of Voting Interest.

III. Rejects
None

IV. Other Technical Issues
None

V. Comments

V- (i) Voters’ Comments

Commenter 1 (Alana Denning / Samsung Electronics) - Comment 1

*TF/TC Chapter to fill in section/paragraph #, if necessary. Section 3.2

1) In Limitations section 3.2 there is a typo (1/84 inch should be 1/8 inch)

2) Table 2, 4 and 5: Conversions from mm to inches are not correct in some cases (40 mm ~ 1.5', 50 mm ~ 2', 63 mm ~ 2.5') Test flow rates listed in Tables 2-5 result in very low flow velocity (~0.1 ft/s) which is not representative of process conditions; are these off by one order of magnitude?

The TC Chapter agreed to do one of the following actions.

*No motion is required in this step.

- Already addressed by Commenter #, Comment #
- No further action was taken by the TC Chapter.
- Refer to the TF for more consideration.
- New Business
- X Editorial Change

Options for editorial change (check one)

Case 1: No vote in this section:
To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.

Case 2: Voted in this section:
Original section number and at least one full sentence are required in “FROM” and “TO” fields.
Editorial Change

FROM: Section/Paragraph: Section 3.2

3.2. These methods are limited to testing components with an orifice size from 3.175 mm (1/8 inch) minimum to ~ 63 mm (2 inch) maximum.

TO: Section/Paragraph Section 3.2

3.2. These methods are limited to testing components with an orifice size from 3.175 mm (1/8 inch) minimum to ~ 63 mm (2 inch) maximum.

Justification (If necessary)

1) Editorial typo, 3.175mm = 1.8 inch, not 1.84
2) No action or changes needed to address second part of voter comment regarding Tables.

Motion To approve above editorial change(s)

Motion by/2nd by Garry Van Schooneveld (CTAssociates) / Koh Murai (Mega Fluid Systems)

Discussion No action needed for the second part of voter comment, it is just the opinion.

Vote 8 Y-0 N; Motion passed.

This table is needed for each Comment accompanied a Vote

VI. Editorial Changes Other than Those Voted on in § V

None

VII. Approval Conditions Check

VII. - (i). Approval Rate

APPROVAL CONDITION 1: All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change. (Regulations ¶ 9.6.2.1.2)

APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (Regulations ¶ 9.6.2.1.3)

Note: If both approval conditions are not satisfied, the Document fails.

<table>
<thead>
<tr>
<th>Approval Rate</th>
<th>Accepts</th>
<th>(Accepts + Valid Rejects)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>≥90%</td>
</tr>
</tbody>
</table>

VII. – (ii) Approval Level (check one)

Note: See Regulations § 9.6.2 for further information.
Globally Approved (No Ratification Ballot needed):
The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee.

Need a Ratification Ballot:
The Letter Ballot meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

VIII. Safety Check

Note: See Regulations § 15 for further information.

<table>
<thead>
<tr>
<th>Motion</th>
<th>This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (Regulations ¶ 8.7.1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This is a Safety Document, when all safety-related information is removed, the Document is not technically sound and complete. (Regulations ¶ 8.7.2)</td>
</tr>
<tr>
<td></td>
<td>Safety Checklist (Regulations ¶ 15.3) is complete and has been included with the Document throughout the balloting process. (Regulations ¶ 15.1.2)</td>
</tr>
</tbody>
</table>

Motion by/2nd by: Koh Murai (Mega Fluid Systems) / Laura Ledenbach (Peroxy Chemicals)

Discussion: None

Vote: 8 Y-0 N; Motion passed
IX. Intellectual Property (IP) Check

Note: This Letter Ballot may cover all or part of a Standard or Safety Guideline. Regardless of the coverage, this IP check applies to the entire Standard or Safety Guideline*. See Regulations § 16 for further information.

<table>
<thead>
<tr>
<th></th>
<th>The TC Chapter meeting chair asked those participating, if they were aware of any patented technology that might be relevant (see Regulations ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see Regulations ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, Regulations § 8.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>The question is NOT answered in affirmative (No potentially material patented technology or use/reproduction of copyrighted items/trademarks is known.)</td>
</tr>
<tr>
<td>X</td>
<td>Is any of the known IPs a patented technology?</td>
</tr>
<tr>
<td></td>
<td>Yes, at least one of them is a patented technology GO TO IX (a) “Patented Technology” subsection</td>
</tr>
<tr>
<td></td>
<td>No GO TO IX (b) “Copyright items” subsection</td>
</tr>
<tr>
<td></td>
<td>The question is answered in affirmative</td>
</tr>
</tbody>
</table>

X. Action for This Document

Motion  
This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.  
This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.  
This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.  
This Document failed TC Chapter review and will be returned to the TF for rework.  
This Document failed TC Chapter review and work will be discontinued.

Motion by/ 2nd by  
Laura Ledenbach (Peroxy Chemicals) / David Kandiyeli (Mega Fluid Systems)

Discussion  
None

Vote  
8 Y-0 N

Final Action  
X Motion passed  
Motion failed

Note: If the use of PMPT or copyrighted item is justified by the TC Chapter, LOA or release form must be received before publication can proceed.