

EU Gases & Liquid Chemicals Committee Meeting Summary and Minutes

SEMICON Europa 2013
October 8, 2013
Dresden, Germany

Next Committee Meeting (tentative)
SEMICON Europa 2014
Tuesday October 7th, Grenoble, France

Table 1 Meeting Attendees

Co-Chairs: Jean-Marie Collard (Solvay Chemicals), Gummaar De Vos (FFEM)

SEMI Staff: James Amano

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Applied Materials	Neuber	Andreas		Fabry	Laszlo
Honeywell	Bloedorn	Wilhelm	Technology Consulting Wolke	Wolke	Klaus
Pall	Ruth	Jochen	Tiger Optics	Rowley	Steven

Table 2 Leadership Changes

None

Table 3 Ballot Results

Passed ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

Failed ballots and line items were returned to the originating task forces for re-work and re-balloting.

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
5324	New Standard: Guide for Cyclopentanone	Passed as balloted
5326	New Standard: Guide for Methyl Isobutyl Carbinol (MIBC)	Passed as balloted
5496	Line Item Revision to SEMI C80-0113, Guide for Tetrakis(Dimethylamino) Silane (TDMAS)	Passed as balloted
5635	Withdrawal of SEMI C61-0707, Specification for Bar Code Container Identification	Passed as balloted

Table 4 Authorized Ballots

<i>#</i>	<i>When</i>	<i>SC/TF/WG</i>	<i>Details</i>
5492	Cycle 1-2014	Solvents in Advanced Processes	New Standard: Guide for Ethylene Glycol

Table 5 Authorized Activities

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
5656	SNARF	Precursor Specifications Task Force	Revision to SEMI C65-0308–Guide for Trimethylsilane (3MS), 99.995% Quality
5657	SNARF	Precursor Specifications Task Force	Revision to SEMI C66-0308: Guide for Trimethylaluminium (TMAI), 99.5% Quality
5658	SNARF	Precursor Specifications	New Standard: Guide for Pentakis(Dimethylamino) Tantalum (PDMAT)

Table 5 Authorized Activities

#	Type	SC/TF/WG	Details
		Task Force	
	TF	Permeation Tubes for Trace Moisture Calibration	

Note: SNARFs and TFOFs are available for review on the SEMI Web site at:
<http://downloads.semi.org/web/wstdsbal.nsf/TFOFSNARF>

Table 6 New Action Items

None

Table 7 Previous Meeting Action Items

Item #	Assigned to	Details
EUGLC 1210-01	Gummaar De Vos (FFEM)	Gummaar De Vos to check at FFEM to see if C61, Specification for Bar-Code Container Identification is still being used. CLOSED
EUGLC 1210-01	Jean-Marie Collard (Solvay Chemicals)	Jean-Marie Collard to consider a SNARF to update SEMI F96, Specification for Port Configuration of Canisters to Contain CVD Precursors OPEN
EUGLC 1210-01	Gordon Ferrier (Air Products)	Gordon Ferrier to contact Jim McKinley and explain how to introduce the new activity, via a SNARF, into the SEMI Standards Program. CLOSED
EUGLC 1110-03	Gummaar DeVos (FFEM)	To send SEMI Staff the following documents for cycle 1 or 2-2012 ballot: <ul style="list-style-type: none"> • Doc. 5325 New Standard: Guide For Dimethyl Dimethoxy Silane (DMDMOS) OPEN • Doc. 5328 New Standard: Guide for Tetrakis(Dimethylamino) Silane (TDMAS) CLOSED • Doc. 5329 New Standard: Guide for Tris(Dimethylamino) Silane (3DMAS) CLOSED

1 Welcome, Reminders, and Introductions

Committee Chair Jean-Marie Collard called the meeting to order at 14:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: Required Elements June 2, 2010.ppt

2 Review of Previous Meeting Minutes

The committee reviewed the minutes of the previous meeting.

Motion: To approve the minutes as written.

By / 2nd: Wilhelm Bloedorn (Honeywell)/Andreas Neubauer (Applied Materials)

Discussion: None

Vote: 5-0

Attachment: EU Gas Chem Meeting Minutes 20121010 v3.pdf

3 Liaison Reports

3.1 Japan Gases & Facilities Committee

Jean-Marie Collard reported. Highlights:

- F1 Revision Task Force
 - No activity
- Gas Panel Test Method Task Force
 - No activity
- 5-year-review Task Force
 - Reapproval of SEMI F80-0309, Test Method for Determination of Gas Change/Purge Efficiency of Gas Delivery System (with Editorial Changes) Reapproval of SEMI F102-0306, Guide for Selecting Specifications for Dimension of Components for Surface Mount Gas Distribution Systems will be submitted for Cycle 7, 2012 and will be reviewed on Dec. 5.
- Standardization of live Gas Flow Rate Study Group
 - A study group was newly set up to explore the possibility of the Standardization of Live Gas Flow.
 - The first meeting was held on September 27, and what standardization of live gas flow is realistic was discussed.
 - Will ask to provide the data about gases to some Mass Flow Controller Manufacturers.

Attachment: 1310_JA_G+F_LiaisonR_for_SEuropa_r0.0.ppt

3.2 NA Gases Committee

- New SNARFs
 - Mass Flow TF
 - Doc. 5610, Auxiliary Information: Codes of Gases, Gas Mixtures and Vaporizable Materials Used in Digital Mass Flow Controllers
 - Gases Specifications TF
 - Doc. 5069, Revision of SEMI C3.24.0309, Specification for Sulfur Hexafluoride (SF6) in Cylinders, 99.97% Quality
 - Doc. 5611, Reapproval of SEMI C3.20-0309, Specification for Helium (He), in Cylinders, 99.9995% Quality Inactive Standards

Attachment: NAGasesLiaisonReport September2013.ppt

3.3 Japan Liquid Chemicals Committee

- Liquid Filter (LF) Task Force
 - Doc. #5297, New Standard: Test Method for Particle Removal Performance of Liquid Filter Rated 20-50 nm with Liquid-Borne Particle Counter, was pass as balloted with editorial changes at Japan Liquid Chemicals Committee meeting on April 5 and published as SEMI C82-0713.
- Liquid-Borne Particle Counter (LPC) Task Force
 - The Task Force is asking the particle manufacturers to indicate the uncertainty of the mass concentration of the test particle. SEMI C77-0912 would be revised according to the result.

Attachment: 1310_JA_LC_LiaisonR_for_SEMICON-EU_r0.1.ppt

3.4 NA Liquid Chemicals Committee

- UPW Filtration Efficiency TF / F63 TF / IX Resin TF discussion
 - SEMI F63 (Guide for UPW) was published earlier this year and the TF will review it again

- Expect a Revision to SEMI F63 SNARF next year
- SEMI IX (Ion Exchange) Resin TF Discussion
 - Proposed TF to deal with contamination from Ion Exchange Resin used in UPW piping
 - The TF and SNARF for a new IX Resin contamination document were approved by the committee

Attachment: NA LChem Report Oct 2013 MT.ppt

3.5 SEMI Staff Report

- 2013 James Amano reported.
 - An additional ballot cycle has been added to accommodate meetings held in January and February.
 - Cycle 8, 2013
 - Ballot Submission Date: Nov 15, 2013
 - Voting Period Starts: Nov 29, 2013
 - Voting Period Ends: Dec 31, 2013

Attachment: SEMI Staff Report (Europa 2013) rev2.ppt

4 Ballot Review

4.1 Document # 5324, New Standard: Guide for Cyclopentanone

4.2 Document # 5324, New Standard: Guide for Methyl Isobutyl Carbinol (MIBC)

4.3 Document # 5496, Line Item Revision to SEMI C80-0113, Guide for Tetrakis(Dimethylamino) Silane (TDMAS)

4.4 Document 5635, Withdrawal of SEMI C61-0707, Specification for Bar Code Container Identification

All four ballots were approved as balloted and will be forwarded to the ISC Audits and Reviews Subcommittee for procedural review.

5 Subcommittee & Task Force Reports

5.1 Precursor Specifications Task Force

- The TF has five ballots under development. PDMAT is almost ready. In addition, two older published standards are due for five-year review (refer to **Old Business** section below).

5.2 Solvents Task Force

- Multiple ballots from the TF were approved today. The TF is now working on:
 - 5492, New Standard: Guide for Ethylene Glycol (draft is ready)
 - New Standard: Guide for Cyclo Hexanone (needs more time)

Motion: To approve issue of ballot 5492 in Cycle 1 or 2, 2014

By / 2nd: Gummaar De Vos (FFEM)/Jochen Ruth (Pall)

Discussion: None

Vote: 5-0

5.3 ITRS Update

Andreas Neuber reported on the latest developments in the International Roadmap for Semiconductors

Attachment: ITRS_ChemGroup_Update_130703.ppt

6 Old Business

6.1 Five-Year review

- SEMI C65-0308–Guide for Trimethylsilane (3MS), 99.995% Quality
- SEMI C66-0308: Guide for Trimethylaluminium (TMAI), 99.5% Quality

Motion: To approve SNARFs to revise C65-0308 and C66-0308.

By / 2nd: Klaus Wolke (Tech Consulting Wolke)/Jochen Ruth (Pall)

Discussion: None

Vote: 5-0

7 New Business

7.1 Permeation Tubes For Accurate Gas Standards In The Absence Of A True Zero Reference

Steven Rowley presented.

- In the global marketplace there is a need to monitor for trace concentrations of water in a variety of gases where water vapor in the process gases can affect product quality and/or yield. Examples include such diverse areas as the production of microelectronic devices, the manufacture of high grade polymers, and welding and heat treating of high alloy components subject to extreme stresses such as those found in Jet aircraft engines. Unfortunately there are no absolute analytical systems for moisture that can be applied. Often the instrument response is not independent of the background gas and all are subject to some level of poisoning by other contaminants. This is especially true as concentrations go to the sub-ppm level. In some cases the monitor will cease to respond when exposed to a dry sample for an extended period. Thus there is a critical need for a generally applicable method of preparing trace concentration moisture standards, and particularly one that can be used in industrial ‘field’ conditions.
- The goal of the new TF will be to develop a consensus test method for trace moisture calibration of permeation tubes

Motion: To approve formation of the Permeation Tubes for Trace Moisture Calibration TF.

By / 2nd: Steven Rowley (Tiger Optics)/Jochen Ruth (Pall)

Discussion: None

Vote: 5-0

8 Action Item Review

8.1 *Open Action Items*

James Amano (SEMI) reviewed the open action items. These can be found in the Open Action Items table at the beginning of these minutes.

8.2 *New Action Items*

James Amano (SEMI) reviewed the new action items. These can be found in the New Action Items table at the beginning of these minutes.

9 Next Meeting and Adjournment

The next meeting of the EU Gases & Liquid Chemicals Committee is scheduled for SEMICON Europa, Tuesday October 7th 2014 in Grenoble, France.

Respectfully submitted by:
James Amano
SEMI HQ

Table 8 Index of Available Attachments #1

#	<i>Title</i>	#	<i>Title</i>
1	Required Elements June 2, 2010.ppt	7	SEMI Staff Report (Europa 2013) rev2.ppt
2	EU Gas Chem Meeting Minutes 20121010v3.pdf	8	ITRS_ChemGroup_Update_130703.ppt
3	1310_JA_G+F_LiaisonR_for_SEuropa_r0.0.ppt	9	
4	NAGasesLiaisonReport September2013.ppt	10	
5	1310_JA_LC_LiaisonR_for_SEMICON-EU_r0.1.ppt	11	
6	NA LChem Report Oct 2013 MT.ppt	12	

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at www.semi.org.