



INSPECTION • ANALYSIS • TESTING



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Whitesboro, NY 13492
1 (855) ORS-LABS

Attn: Component Testing Group
E-mail: component@orslabs.com

Material Outgassing Analysis Submission Form

Engineering Contact: _____ Date : _____

Company: _____ P.O. No.: _____

Address: _____ Release No.: _____

_____ Phone & Ext: _____

E-mail: _____ Expedite Service

(Surcharge Will Apply)

ORS Quote No.: _____

Sample Description:

of Samples:

Multi Component Device or Sample

All components are solid

Sample Melting Point: _____ °C

(Lowest melting point of all materials within the sample)

UHV-EGA TEST CONDITIONS

Discussion of analysis is recommended prior to quotation and submission

Analysis Mass Range: Standard (1-150amu) High Range (1-300amu)

Process #	Ramp or Dwell	Start Temp. °C (min 24°C)	End Temp. °C (max 1200°C)	Ramp Rate (°C / Min) Available Range 0.1° – 15°C/ min.	Dwell / Soak Time (min) Applies to Dwell Cycles Only
Example	Ramp	24	600	12.5	N/A
1					
2					
3					
4					
5					
6					
7					
8					

Collect Gas Sample for Additional GC/MS Analysis (Additional Fees will Apply)

ADDITIONAL OPTIONS FOR MATERIALS OUTGASSING STUDIES

See reverse side for additional information

■ ASTM-E595

■ Sealed Glass Ampule Outgassing Study

Standard Test Parameters*

*Testing performed per ASTM-E595 requirements; no deviations permitted

Samples will be tested in triplicate. Individual, replicate and avg. results reported. In the event of insufficient sample size, the method allows testing two replicates. Please submit sufficient mass for 3X testing.

Non-Standard Test Parameters (Additional Fees Will Apply)

Test Temperature: _____ °C Collector Temp: _____ °C

Test Time: _____ Hours

Additional Options- Fees will Apply:

Sample Preparation / Curing

Water Vapor Regained (WVR)

Select Ampule Outgassing Study Test Conditions:

Vacuum Seal Bake Conditions:

Nitrogen Seal Temp: _____ °C

Other Gas _____ Time: _____ Hr.

Empty Control Test Sample (recommended)

Select Analytical Technique:

IVA® Test (AMU 1 – 140)

GC / MS (AMU 35 – 550)

Both (Additional Samples Required)

See reverse side for additional information

Static Headspace by GC/MS Prebake / Test Conditions:

Return Shipment

UPS: Red Blue Ground

Fed Ex: Pr. 1 Std. Econ.

Acct. #:

Additional Instructions or Restrictions

▲ **SOME IMPORTANT REMINDERS** ▲

- Please specify “Additional Instructions or Restrictions” that should be followed during sample handling, testing or shipment.
- ASTM-E595 requires test and preparation criteria for comparison purposes. Any deviation from the required test conditions will be documented and the data will be labeled as “Non-Standard”
- These test methods are destructive. ORS makes every effort to avoid damage to components but makes no guarantee that elements will not be damaged during testing.
- Samples larger than method requirements may be prepared, cut or sliced to meet size/mass requirements as listed below. All effort to test “representative samples” will be taken to maintain similar portions of original material. Images of samples “as received” and “as tested” will be included in the Analytical report.
- Please provide a valid Purchase Order and, if requested by your company, a Release Number. Complete test instructions and a PO or credit card are required to begin testing.
- All materials will be returned following testing. All shipping and handling fees associated with the transportation of samples to and from our testing facility are the responsibility of the client.
- Unless otherwise requested, test reports will be sent electronically.
- On-site visits are encouraged and we welcome your personal involvement during sample analysis.
- Please refer to the ORS terms and conditions: <https://orslabs.com/ors-terms-conditions>
- For technical information and pricing, please contact the Component Testing Group at (855) ORS- LABS.

Criteria and limitations for material outgassing techniques

Test Variables				
Sample dimensions	Test Temp Range	Collector Temp Range	Mass range (amu)	Materials applicable for test
UHV-EGA				
≤ 100 mm (wide) ≤ 60 mm (height)	28°C – 1200°C	-	1 – 300	solid/multicomponent solid (melting point > 1200°C)
ASTM-E595: Standard parameters (no deviation permitted)				
1- 3 mm ³ > 2 grams total material	125°C	25°C	-	Solid/liquid (melting point >125°C)
ASTM-E595: Non-standard parameters				
< 10mm x 6mm x 12mm	<300°C	15°C below ambient	-	Solid/liquid (melting point > desired sample temp)
Sealed glass ampule outgassing study				
<11 mm diameter <40 mm high	28°C-450°C	-	IVA: 1-140 GCMS: Std 35 – 550 High Range 35-1050	Any solid
Static headspace analysis				
< 11 mm diameter < 40 mm high	28°C-250°C	-	IVA: 1-140 GCMS: Std 35 – 550 High Range 35-1050	Solid/liquid