

Coded Note Number: **LI108**

Revision: **B**

Revision Date: **September 15, 2003**

Title: **TEST REPORTS FOR SOLID NONMETALLIC MATERIALS**

Vendor shall provide test reports meeting the following requirements:

An analysis shall be submitted for each solid nonmetallic material which forms a seal or contacts system fluid within a component (e.g., o-ring, gasket, valve seat, etc.) supplied on this order to which this note applies. Alternately, a report of tests performed within four years of placement of this order on material produced by the same manufacturer to the same formulation, by the same production processes, and by using ingredients of the same kind, nature and quality as those used to produce the material supplied to this order may be submitted.

Analysis requirements for solid non-metallic materials:

Solid nonmetallic materials shall be quantitatively analyzed only for mercury, water leachable halogens, and water leachable sulfur as identified in Table 1.

TABLE 1 - DETRIMENTAL MATERIAL LIMITS

DETRIMENTAL MAT'L	LIMIT
MERCURY	10 PPM
BROMIDES	250 PPM (LEACHABLE)
CHLORIDES	250 PPM (LEACHABLE)
FLUORIDES	250 PPM (LEACHABLE)
SULFUR	250 PPM (LEACHABLE)

All test reports supplied in fulfillment of this order shall be in the form of reports issued by the organization performing the tests or exact copies thereof. Data transcribed to another organization's forms are not acceptable. Test report copies shall be clear, legible, and of first-rate quality.

The water leachable test shall be in accordance with Appendix A, Section 60 of MIL-STD-2041, Revision D Notice 2. The analysis report shall state that the analysis was performed in accordance with MIL-STD-2041, Revision D, Notice 2.

**EXCEPTIONS:**

A. Solid nonmetallic materials may be analyzed for the total levels of halogens or sulfur instead of water leachable levels. In such cases, the limits for totals are the same as for leachables.

B. Solid nonmetallic material manufacturers may certify that mercury and mercury compounds have not been added to the solid nonmetallic material and have not come into contact with the

solid nonmetallic material during processing, or may certify that the solid nonmetallic material contains less than 10 PPM Mercury, in lieu of performing a chemical analysis.

When the vendor does not have the capability to perform the required testing, and testing by an outside laboratory is impractical, the vendor may arrange to have the material tested by Newport News prior to hardware manufacture. When this option is exercised, the following requirements apply:

- A. The allowance to exercise this option must be specifically approved in writing by Newport News and testing of the material must be arranged by the Newport News Engineering Department that requires the material.
- B. The manufacturer must submit a sample of the same material (i.e., material produced by the same manufacturer to the same formulation, by the same production processes, and by using ingredients of the same kind, nature and quality) that will be used to manufacture the hardware being purchased. The sample must weigh at least 50 grams.
- C. The purchased hardware shall not be manufactured until the test sample has been approved by Newport News. Upon Newport News approval, the vendor will be notified of the acceptable lab report number and test date. Each time the hardware is shipped to Newport News, the vendor must submit a detrimental material analysis certification stating the following:

“An acceptable detrimental material analysis was performed by Newport News. See Newport News Lab Report Number \_\_\_\_\_, dated \_\_\_\_ \_\_, \_\_\_\_\_. Reference to this lab report in lieu of submittal of an actual test report fulfills the detrimental material analysis submittal requirement of purchase order coded note LI108. Material manufactured in fulfillment of this purchase order was produced within four (4) years of the date of the above referenced lab report.”

- D. For subsequent orders of the same hardware, the Newport News test report may be referenced for up to four years from the date of the test report as long as the hardware submitted for Newport News acceptance is manufactured using the same material that was previously tested (i.e., material produced by the same manufacturer to the same formulation, by the same production processes, and by using ingredients of the same kind, nature and quality).