

**TRANSPORT CONTAINER THERMAL TEST PROCEDURE**

**Design  
Approval**

D W Rogers

*DWRogers*

.....  
(signature)

date: 14/04/05

**Quality System  
Approval**

B S Patel

*Bharat Patel*

.....  
(signature)

date: 15 April 2005

**Date implemented**

24 MAY 2005

**Controlled file number**

## 1.0 PURPOSE AND SCOPE

The purpose of this procedure is to test the thermal performance of a transport container with an internal heat load. The results may be used in manufacturing quality control, routine inspection or at any other time. It is not necessarily restricted to this application.

## 2.0 EQUIPMENT

### 2.1 INSTRUMENTATION

- Thermocouples and thermometer.
- Ambient air thermometer.

### 2.2 OTHER EQUIPMENT

- Transport container.
- Internal heat load of nominal 50% of maximum licensed capacity in normal form.
- Spacers, if required, to allow exit of thermocouple leads.

## 3.0 PROCEDURE

### 3.1 SAFETY

- The container surface may get hot enough to burn unprotected skin.
- Dose levels around the lid may be higher than normal if the lid has to be supported on spacers to allow access for thermocouple leads.
- Ensure all operations comply with your local safety rules and procedures.

### 3.2 DESCRIPTION

Unless otherwise instructed:

- Assemble the container in accordance with its Certificate of Approval (if none then the assembly drawing).
- Site the test in a clear area at least twice as wide as the container and free from continuous drafts.
- Use sufficient thermocouples to measure the temperature at critical points. On large containers use sufficient duplication to average key readings.
- Load basket to the loading plan and check doserates are within acceptable limits before proceeding.
- Record temperatures when rise is less than 0.25% per hour.

### 3.3 PASS/FAIL CRITERIA

- To be specified by Design Authority.
- In the event of a fail result label flask clearly "Failed QC" or "Quarantine" unless otherwise specified.

## 4.0 DOCUMENTATION

### 4.1 CHECKLIST

To ensure the test is adequately planned and recorded a checklist should be used. This should contain all key instructions together with any deviations from the normal assembly

procedure (or assembly drawing), the data logging requirements, pass/fail criteria and space for observations. |

#### 4.2 RECORDS

- Record any deviations from the checklist instructions. |
- Complete report as the test progresses.
- Record all pertinent observations, if necessary taking photographs.
- Ensure completed report is reviewed and countersigned by either a test witness or your supervisor.
- Unless otherwise specified file report in manufacturing dossier or maintenance log.