QUALITY REQUIREMENTS SPECIFIED IN THIS DOCUMENT ARE PART OF THE TERMS AND CONDITIONS OF THE PURCHASE ORDER. FAILURE TO COMPLY MAY RESULT IN WITHHOLDING ACCEPTANCE OF SHIPMENT

1. **CONTROL OF QUALITY**

The supplier is required to provide and maintain an Inspection and Quality Control System to commensurate with the complexity and reliability of the product to be supplied, and with the quality requirements of the Purchase Order. Compliance with this clause in no way relieves the seller of the responsibility to furnish acceptable supplies or services as specified on the purchase order.

1. **SOURCE INSPECTION**

Thin Film Technology, Inc. reserves the right of access to suppliers’ facility or other designated facility for review of quality systems, quality records and facility and the right to inspect any or all work included in this purchase order. Quality records includes but not limited to, raw material certifications, work instructions, inspection and test data, physical/chemical test reports, assembly, manufacturing and special processes. Required documentation for shipment must be completed and signed by the supplier authorized quality personnel, and available for the Thin Film Technology, Inc. supplier quality assurance representative. Verification by Thin Film Technology, Inc. does not absolve the supplier of the responsibility to provide acceptable product, nor shall it preclude subsequent rejection by Thin Film Technology, Inc.

1. **CHANGES OF CONFIGURATION AND PROCESSES**

The supplier shall notify Thin Film Technology, Inc. of any proposed changes to materials, manufacturing, fabrication methods, or processes, and obtain written approval from Thin Film Technology, Inc. Purchasing Department prior to implementation. Such approvals do not affect or waive applicable and/or acceptance requirements. The supplier shall immediately notify Thin Film Technology, Inc. of changes to ownership, manufacturing or processing location.

## **RECORD RETENTION**

The supplier shall maintain on file at the supplier’s facility, quality records traceable to the conformance of product delivered to Thin Film Technology, Inc. The supplier shall make such records available to regulatory authorities, Thin Film Technology, Inc. The supplier shall retain such records for a period not less than 2 years from the date of shipment.

## **CERTIFICATE OF COMPLIANCE**

Each shipment shall be accompanied by a signed and dated certification containing the following:

* Statement that material, processing, and finish of parts on this purchase order meet all specifications and drawing requirements
* Thin Film Technology, Inc. part number and revision
* Signature and title of authorized company representative
* Thin Film Technology, Inc.’s purchase order number, quantity of order
* As applicable lot/batch or heat numbers, shelf /life expiration date.

## **CALIBRATION SERVICE REQUIREMENTS**

Each item shall be accompanied by a signed certification of calibration stating that the item(s) have been calibrated and are traceable to ANSI/ISO/IEC 17025.

* The certification shall reference the NIST test number and accuracy for the calibration standard(s) used, where applicable, including as-­‐found and as-­‐left data for the equipment being calibrated.
* The certification shall reference the National Institute of Standards and Technology (NIST) test number for the calibration standard(s) used, where applicable

## **CONTROL OF INSPECTION EQUIPMENT**

The supplier shall maintain a calibration system compliant, at minimum, with nationally recognized standards governing the measuring equipment being utilized.

## **CONTAMINATION CONTROL**

Components, product, material, or services, shall be visibly clean with the absence of all particulate visible to the normal unaided eye. Contaminated items will be cause for rejection of the items.

## **CONTROL OF NONCONFORMING MATERIAL**

The supplier or lower-­‐tier suppliers are not authorized to disposition nonconforming materials, components or parts as “rework” or “use as is”. For this purpose, “materials” shall be defined as all material, components, parts or services provided by the supplier or lower-­‐tier supplier which are under Thin Film Technology, Inc. design control. Any nonconforming materials shall be segregated and withheld from shipment to Thin Film Technology, Inc. unless negotiated in advance. When authorized to ship nonconforming material, the supplier shall insure that the nonconforming items are identified as being nonconforming on certification statement. Materials rejected by Thin Film Technology, Inc. shall not be returned to Thin Film Technology, Inc. without appropriate corrective action having been taken.

## **Monitoring of supplier performance** Supplier performance will be evaluated on a continual basis, searching for any nonconforming material received or services failing to meet stated requirements including: delivery schedule, product quality according to supplier testing, accounting errors, services rendered not meeting purchase requirements, etc. In the event of a nonconformance, Thin Film Technology, Inc. will create and provide a written report of the stated failures (see section 15) delivered to the supplier along with whatever remediation is required depending on product or services rendered. The report will be kept by Thin Film Technology for a minimum of (2) years and a Nonconformance entry will be entered against the supplier. Supplier performance will be evaluated on a yearly basis taking into account any nonconforming actions.

## **HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY**

Unless otherwise specified, preservation, packaging, handling and shipping of items shall be in accordance with best commercial practices to prevent damage and ensure that original quality is maintained.

## **REACH**

The supplier agrees to:

Meet European (CE) Regulation n° 1907/2006 (REACH) regarding registration, evaluation, authorization and restriction of chemicals by:

* Ensuring that authorization for use has been granted for chemicals included in appendix XIV
* Informing if a candidate substance is in an item with a concentration above of 0.1% weight by weight
* Ensuring registration of substances used
* Informing, if concerned, if a substance included in appendix XVII (substances with restrictive uses) is included in an item.

Propose, as soon as possible, alternate solution to a substance part of the candidate’s substances in order to ensure continuity of deliveries.

## **SHELF LIFE CERTIFICATION**

At the point of delivery, products/materials shall have a minimum usable shelf life of 2 months, as defined by the manufacturer. Each shipment shall be accompanied by a signed and dated certification listing shelf life, cure and/or manufacture date and expiration date. Cure and /

or manufacturing date shall also be physically marked on product or packaging. Marking of expiration date is the preferred method.

## **100% INSPECTION REQUIREMENT**

The supplier must perform 100% inspection of all items when stated on the purchase order to ensure compliance to drawing and specification requirements. Objective evidence of such inspection must be maintained on file and available for review by Thin Film Technology, Inc.

## **PRODUCT FAILURE FEEDBACK**

The supplier shall have a system for rapid feedback to Thin Film Technology, Inc. of information concerning product failure of items covered by this Purchase Order, which occur during any phase of qualification and/or acceptance testing. This feedback system shall include, as a minimum, the following:

1. Email notification to Thin Film Technology, Inc. Purchasing or Quality Assurance within 24 hours after occurrence of failure.
2. An outline of the failure investigation to be conducted within 5 working days of the failure.
3. A failure analysis report which will completely describe the specific cause, the analysis method and the action taken to eliminate the cause within 30 days of the failure.

## **INSPECTION BY SAMPLING**

The supplier may substitute sampling inspection in lieu of 100% inspection if inspection is performed in accordance with ANSI Z 1.4. Other inspection plans may be used with Thin Film Technology, Inc.’s approval.

## **SUB-­‐TIER SUPPLIER FLOW DOWN**

The supplier is required to flow down all Thin Film Technology, Inc. purchase order requirements to sub-­‐tier suppliers including but not limited to requirements contained herein, Thin Film Technology, Inc. Terms and Conditions and any special instructions, etc.

## **MANUFACTURING LOT, BATCH, WORK ORDER, JOB NUMBER CONTROL**

All parts on this order will be traceable to/identified with a lot number, work order number, batch number or job number. A lot, batch, work order, or job will be defined as material or parts produced by a single type, grade, or composition in accordance with the purchase order. *Documentation is required with each shipment.*

## **THIN FILM TECHNOLOGY, INC./ CUSTOMER/GOVERNMENT**

Thin Film Technology, Inc./Customer/Government reserves the right of access to subcontractor’s/ supplier’s facility for review of quality systems, records and facilities. The right to inspect any or all work included in this order is also reserved. Verification by Thin Film Technology, Inc./Customer/Government does not absolve the subcontractor/supplier of the responsibility to provide acceptable product, nor shall it preclude subsequent rejection by Thin Film Technology, Inc./Customer/Government