1. **PURPOSE:**

This procedure establishes the minimum PPG Aerospace requirements for a Supplier’s Quality Plan. These Requirements pertain to the documentation and inspection/testing necessary to assure product or service conformance to all drawings, specifications, purchase orders and contractual requirements.

1. **LIMITATIONS**:

This procedure is limited to Suppliers of materials, special processes, software and services used in the development and fabrication of pre-production and final production for PPG Aerospace. This procedure does not include engineering development or evaluation items, laboratory test, development test and test equipment.

1. **DEFINITIONS:**

FAA- Federal Aviation Administration

DPAS- Defense Property Accountability System

FOD- Foreign Object Debris

Supplier – Tier one (1) supplier to PPG Aerospace

1. **ORGANIZATIONAL UNITS AFFECTED:**

Purchasing

Supply Chain

Supplier Quality

1. **PROCEDURE:**
	* This procedure is part of the purchase order and flow down requirements, when referenced. The Supplier shall determine the processes needed for a documented quality management system to ensure compliance with the requirements of the purchase order for the product or service provided. This procedure requires that the quality plan be effective, yet economical and able to be adjustable to suit the type and phase of procurement. Principal considerations shall be given to complexity of product design, quantity, and special manufacturing processes and techniques.

* + The quality plan is subject to surveillance by PPG Aerospace’s Quality Assurance and Purchasing Departments, Customers, Regulatory Government Agencies (FAA, Federal Aviation Administration, and DPAS, Defense Accountability System). If the quality plan is found to be ineffective for the control of the quality of product and services provided to PPG Aerospace, approval status will change to not approved.

* + The Supplier shall provide necessary information, facilities, and equipment to perform required surveys, tests, and inspections. Product acceptance by PPG Aerospace at the vendor’s plant does not relieve the Supplier of the responsibility of providing parts in accordance with full specification requirements.

* Right of Access/Entry: Supplier shall grant “Right of Access/Entry” to PPG, PPG’s customers and any regulatory authorities to applicable areas of all facilities, at any level of the supply chain, involved in the order and to all applicable records.
* When specifically requested by Buyer, Seller shall make specified quality data and/or approved design data available in the English language. Seller shall maintain an English language translation of (1) its quality manual, (2) the operating instructions that implement the quality manual requirements, and (3) an index of Seller’s procedures that contain quality requirements. Buyer may require additional documentation for translation, including but not limited to: shop orders, technical specifications, certificates, reports, and nonconformance documents.

* PPG Aerospace’s evaluation system is based on the quality of supplied items and on-time delivery. This evaluation system identifies those Suppliers who consistently meet all purchase order requirements and those who do not. Suppliers, who continue to perform unsatisfactorily, risk curtailment or loss of future PPG Aerospace business.

1. **REQUIREMENTS:**
* Supplier’s management with executive responsibility shall define and document the organizational responsibility, authority and interrelation of personnel who manage, perform and verify work that affects the quality of product or services. This personnel shall have the organizational freedom and authority to:
* Initiate action to prevent the occurrence of nonconformities.
* Identify and record problems relating to product, process and quality system.
* Initiate, recommend or provide solutions through designated channels.
* Verify the implementation of solutions.
* Control further processing or delivery of nonconforming product until the deficiency has been corrected.

* Supplier’s management with executive responsibility shall ensure that personnel are aware of their contribution to product or service conformity, their contribution to product safety and the importance of ethical behavior.

1. **QUALITY SYSTEM**:
	* The Supplier should establish, document and maintain an effective quality system plan or instructions to ensure conformance to PPG Aerospace and Regulatory Government

Agencies requirements. PPG requires, at minimum, that the Supplier’s Quality

Management System (QMS) complies with ISO 9001, AS9100, or AS9120 appropriate to the type of product/service being delivered. Some suppliers may be required to have a certified QMS per PPG customers’ requirements.

* + External provider shall promptly notify Buyer’s Authorized Procurement Representative and Supplier Quality Representative of intended or actual changes in the management representative with assigned responsibility and authority for its quality management system.

* + Any changes to the quality plan that can potentially affect or impact the quality of delivered products or services must be approved by PPG Aerospace before implementation.

1. **CONTRACT REVIEW:**
* The Supplier shall define a procedure to assure that PPG Aerospace requirements are reviewed, clearly defined, coordinated and the capability exists to meet contract or purchase order requirements. Any conflicts between the contract or purchase order and the Supplier must be resolved prior to the acceptance of the contract or purchase order.

1. **DESIGN CONTROL:**
	* PPG Aerospace or its Customers retain all authority for design, or changes to existing design, for components fabricated by a Supplier to be installed into a final assembly. No authority for design responsibilities is to be assumed by the Supplier unless explicitly granted by PPG Aerospace, its customers or both.

* + The Supplier shall not incorporate any changes to any drawing, specification, or digital data provided by PPG Aerospace, unless instructed to do so by the PPG Aerospace Buyer in writing. Such instructions will be in the form of an amendment to the purchase order. The Supplier will assure that copies of such authorizations become a part of the shipping documentation package.

* + Material submitted to PPG Aerospace must conform, in all respects, to the exact specification or drawing revision level specified in the purchase order. If no revision is specified, the applicable revision level will be the latest in effect on the date the purchase order is accepted.

1. **DRAWINGS, DOCUMENTS AND DATA CONTROL:**
	* The Supplier shall establish and maintain documented procedures that define the control of all drawings, documents and digital data that relate to the contract or purchase order requirements.

* + Supplier personnel responsible for control of all drawings and documents provided from PPG Aerospace shall acknowledge receipt of all drawings, documentation and purchase order from PPG Aerospace by confirming acceptance and receipt of the purchase order to Buyer. Confirmation must reference the drawings, documents and purchase order number.

* + Internal drawings and documents initiated by the Supplier, shall be reviewed and approved by authorized personnel prior to issue. Current revision of drawing and documents shall be available at locations where processes that affect product functions are being performed. In-valid and/or obsolete drawings and documents shall be controlled and promptly removed from all points of issue or use.

* + The Supplier shall not incorporate any changes to PPG-provided drawings and documents provided by PPG Aerospace unless formal notification of change is received through amendment to the purchase order. Any changes to the Supplier’s internal drawings and documents shall be approved by PPG Aerospace if the change affects the contract or purchase order requirements.

* + Technical data cannot be stored in any cloud environment. Technical data includes, but is not limited to, the following: Formulas, material lists, technical specifications, testing documentation, designs, and blueprint data.

1. **DIGITAL DATA:**
* The Supplier shall establish and maintain a documented procedure that defines or governs receipt, usage, and distribution of product definition datasets (digital data) from PPG Aerospace or its customers. This procedure shall ensure that the configurations of the following digital product systems are identified, controlled and recorded.

* Product Acceptance Software (PAS)
* Computerized Measurement Systems (CMS)
* CAD/CAM Software and Datasets
* Data Analysis Software
* Supplier Generated Datasets (Derivative Datasets)
* Datasets flowed to supplier sub-tier suppliers

* + The Supplier shall develop and maintain a comprehensive audit plan for all operations affecting digital data and related documentation to assure compliance with contractual requirements, whether imposed by PPG Aerospace purchase order or contract, or by direct reference to PPG Aerospace’s Customer documents.

* + All digitally defined tools, physical inspection media (check fixtures, templates, etc.) and product acceptance software will be traceable to the authority dataset and to any tool inspection datasets.

* + In the event a PPG Aerospace Customer specifies Supplier compliance to specific drawings or documents in addition to this procedure, these requirements will be communicated to the Supplier through a purchase order or contract. The current revisions of the Customer’s Drawings and Documents will be provided.

* + PPG Aerospace purchase orders or contracts that require customer provided authority datasets or dataset derivatives for manufacturing and/or product acceptance procedures, the Supplier must comply with those documented dataset requirements.

If assistance is needed in obtaining this procedure, please contact the PPG Aerospace Buyer or QA Manager.

1. **PURCHASING:**
	* The Supplier shall maintain an effective quality procedure to ensure that purchased product conforms to specified purchase requirements for any materials, components or services (e.g. calibration) procured from its suppliers. The Supplier shall maintain an Approved Supplier List that includes the scope of those approvals and shall be made available upon request.

* + Material procured by the Supplier for use on a contract, must be inspected and tested, to ensure that all requirements of the applicable material specifications as shown on drawings and/or the purchase order are met.

* + The Supplier shall flow down purchase order and quality plan requirements to direct and sub-tier suppliers to ensure that requirements are met.

1. **CONTROL OF CUSTOMER SUPPLIED PRODUCT AND TOOLING:**
	* The Supplier shall inspect PPG Aerospace furnished material and/or tooling on receipt to detect damage in transit, and to determine that the material/tooling is complete, qualified for the intended end-use, and the proper type or grade. The Supplier shall notify PPG Aerospace Purchasing of any damage before the tooling is used for any manufacturing or inspection activity.

* + The Supplier shall identify and segregate as nonconforming any PPG Aerospace provided material/tooling found damaged or unsuited for its intended use and request review and disposition from PPG Aerospace Purchasing Department, Quality, Engineering, and/or Tooling Departments. Steps shall be taken to assure that such material is handled in a manner that will prevent further damage or additional repair costs.

* + Periodic inspection shall be conducted to ensure that quality is maintained, that storage conditions are suitable, and that damage or deterioration has not occurred in handling or storage.

* + The Supplier shall maintain records that verify the proper control, care, storage and usage of all tooling.

* + Regardless of ownership (Supplier, PPG Aerospace, PPG Aerospace’s Customer and Government) furnished tooling and equipment shall be maintained in good condition. Furnished material must be used on PPG Aerospace contracts only. Tooling or equipment shall be available for examination and or return to PPG Aerospace upon request. Supplier is responsible for timely calibration of all such tools.

1. **PRODUCT IDENTIFICATION AND TRACEABILITY:**
	* The Supplier shall establish and maintain a procedure for identifying product provided to PPG Aerospace. Any component manufactured to a PPG Aerospace drawing, or PPG Aerospace Customer drawing shall be identified as per specified on a contract, purchase order, or referenced drawings and/or specifications.
	* For small parts such as screws, spacers, etc., the identification shall be recorded on the container, metal/plastic-ring tag, or other suitable means, and attached to the component provided the container is representative of a continuous, uninterrupted manufacturing lot.
	* The supplier shall furnish a Certificate of Conformance (CoC) and/or Certificate of Analysis (CoA) with each shipment. Items contained in the shipment shall be identified on the CoC and/or CoA. These documents shall contain as a minimum the following:

* + - Purchase order, part number.
		- A statement that the material conforms to the applicable specification.
* A statement that conformance test reports and/or inspection records are on file, subject to examination at your facility or at the point of manufacture.
* The CoC and/or CoA shall provide traceability to the authorizing individual by means of signature and/or electronic signature and/or other suitable method.

All products, components and materials provided to PPG Aerospace shall be traceable to Supplier, sub tier supplier and subcontractor processes, test results, inspections and raw material batch numbers. Records of such traceability shall be accessible and available to PPG Aerospace upon request.

1. **PROCESS CONTROL:**
* The Supplier shall plan the production and inspection processes that directly affect quality and shall ensure these processes are carried out under controlled conditions. At a minimum, controlled conditions shall include the following:

* + - Documented procedures defining the production, inspection and

delivery, where the absence of such procedures could adversely affect quality.

* Compliance with documented procedure.
* Compliance with specified drawings, specifications and other requirements’ documents.
	+ - Standards for required workmanship stipulated in the clearest practical manner.
		- Accountability for all product and evidence that all manufacturing and inspections have been completed in sequence as planned, or as otherwise documented and authorized.

* PPG Aerospace will require the Supplier to follow a process control only when required by contract.

1. **SPECIAL PROCESSES:**
* The Supplier shall have an adequate procedure for the control of special processes used in the manufacturing cycle, whether the special process is performed at the Supplier’s facility or is subcontracted. Examples of special processes are (x-ray, magnetic particle, heat- treating, plating, anodizing, soldering, spot welding, fusion welding, fluorescent-penetrant

inspection, etc.) It is the Supplier’s responsibility to utilize only approved facilities for special processes per PPG’s Customer requirements. These control measures shall include the following provisions:

* + - Supplier must ensure special process providers are PPG Customer Approved, where applicable.
		- At a minimum, these special processes shall be performed by \*Nadcap accredited processors, whether performed by the supplier, or a subcontracted to another facility.
		- Any subcontractor, processor, or sub-tier supplier used by the

Supplier shall be included on the PPG Aerospace Approved Supplier List or Customer Approved Suppliers List. Supplier shall provide evidence of the Special Process Suppliers at any subcontractor level at First Article submission.

* + - Certificates of Conformance from special processors shall be retained by the Control of Quality Records procedure, and be available to PPG Aerospace or its customers upon request.

\*Nadcap is the brand name for the global accreditation program for special processes in the aerospace industry. Nadcap is the cooperative program of major companies designed to manage a consensus approach to special processes and products and provide continual improvement within the aerospace industry. Performance Review Institute (PRI) manages the Nadcap accreditation process and certification records.

1. **TOOLING PROCUREMENT:**
* Title of all tooling procured from Supplier shall be the property of PPG Aerospace (free of all liens, and encumbrances) upon acceptance by PPG Aerospace tool inspection. Unless otherwise specified.

* + - Inspection of tooling shall be accomplished by PPG Aerospace inspection personnel at intervals of fabrication and/or completion of design requirements and/or completion of work prior to shipment. Acceptance is subject to compliance of design requirements and/or first run production.
		- The Supplier shall permanently identify each tool per the tool drawing requirement or purchase order specified.
		- Tooling is defined as: jigs, dies, fixtures, molds, patterns, other equipment and manufacturing aids, all components of these items, and replacement of these items, which are of such a specialized nature that without substantial modification or alteration their use is limited to the development or production of particular services or parts thereof or to the performance of particular services. It does not include material, special test equipment, facilities, general or special machine tools or similar capital items.

1. **INSPECTION AND TESTING:**
	* The Supplier shall establish and maintain a process for inspection and testing activities in order to verify that the specified requirements for the product are met. The required manufacturing process steps, required verification and/or validation activities, and the associated records establishing product realization shall be detailed in the Supplier’s quality management system.

* + PPG Aerospace has the right to inspect any article manufactured by the supplier or their sub-tier suppliers at source and/or upon receipt. Inspection, test and manufacturing operations performed by the supplier may be witnessed, on a non-interference basis, completely or in part, by PPG Aerospace, and shall not relieve the supplier of the responsibility of assuring the furnished article conforms in all particulars to the purchase order requirements.

* + PPG Aerospace will continue to verify that satisfactory quality levels are maintained during the active stages of contract performance through various means, including periodic surveillance inspection at the Supplier’s facility.

* + Supplier shall maintain a Foreign Object Damage (FOD) prevention program in accordance with the AS9146 Foreign Object Damage (FOD Prevention Program, required for Aviation, Space and Defense organizations), Foreign Object Damage/Foreign Object Damage (FOD) Prevention program as applicable to the organization. The program shall address the following:

* + - FOD entrapment or where foreign objects can migrate, Supplier shall flow down the FOD requirement to supplier and subcontractors at every tier.
		- Prior to closing inaccessible or obscured areas or spaces and components during assembly, Supplier shall inspect for foreign objects/materials and ensure no FOD Barriers remain embedded.
		- Supplier shall maintain good housekeeping practice to ensure tooling, jigs, fixtures and test or handling equipment are free of FOD.

1. **FIRST ARTICLE INSPECTION:**
* The supplier shall provide production and inspection records to verify acceptance of the configuration and performance of the first item submitted for the following categories:

* + - The Supplier has never produced the item for PPG Aerospace.
		- A 2 year period, as determined by PPG, has elapsed since last production.
		- A new revision to the configuration of the product.
		- As specified on PPG Aerospace purchase order.
		- If a change in process, tooling, or location has occurred.

* First Article Inspection activities shall be performed in accordance with Aerospace Standard AS9102, Aerospace First Article Inspection Requirement, and documented on the appropriate forms included in Aerospace Standard AS9102. The First Article Inspection report shall accompany the shipment when any of the above conditions occur.

1. **INCOMING INSPECTION:**

* + Incoming product shall not be used or processed until it has been inspected or otherwise verified as conforming to specified requirements. Exception: An incoming product needed for urgent production may be released prior to verification, provided it is identified and recorded in order to permit immediate recall and replacement in the event of nonconformity to specified requirements.

* + The supplier shall check material test reports against specification requirements. If incoming product is accepted based on certifications or tests reports, periodic scheduled data validation shall be conducted on samples of product that is identified as raw material with significant operational risk.

1. **IN-PROCESS AND FINAL INSPECTION:**
	* In accordance with the documented procedures, the Supplier shall inspect the product at appropriate phases in the manufacturing flow to verify characteristics that may be difficult or impossible to inspect after subsequent handling.

**Final Inspection and Testing.**

* + To complete the evidence of conformance of the finished product to specified requirements, the supplier shall perform a final inspection in accordance with the Supplier’s documented procedures. The final inspection function shall verify that all required inspection and tests, including those specified for incoming product and in process operations have been satisfactorily completed and recorded.

* + The final inspection shall also verify that all activities specified in the documented procedures or quality plan have been completed and all associated documentation is available and authorized.

* + The Supplier shall establish and maintain records that provide evidence that the product has been inspected and/or tested. These records shall identify the inspection authority responsible for the release of the product.

1. **COUNTERFEIT PART/MATERIAL PREVENTION AND PART OBSOLESCENCE:**
* Supplier shall establish and maintain a “Counterfeit Parts/Material Prevention and Control Plan” in accordance with AS6174. Counterfeit Parts/Material Prevention includes work that is or contains items misrepresented as having been designed and/or produced under an approved plan or other acceptable method. Counterfeit includes “used parts represented as new”.

* + - Supplier shall ensure that counterfeit parts are not delivered to PPG Aerospace.
		- Supplier shall only purchase products to be delivered or

incorporated as parts or materials to PPG Aerospace directly from the Original Manufacturer. Parts or materials shall not be acquired from independent distributors unless approved in advance in writing by PPG Aerospace.

* + - Supplier shall immediately notify PPG Aerospace with the pertinent facts if the Supplier becomes aware or suspects that it has furnished counterfeit parts or materials. When requested by PPG Aerospace, Supplier shall provide documentation that authenticates traceability of the affected items.
		- Supplier shall flow down the “Counterfeit Parts/Material Prevention and Control Plan” to all subcontract levels.
		- Supplier shall utilize a parts obsolescence monitoring program, where applicable, such as with electronic components.
		- In the event of purchased Part Obsolescence from a Supplier or OEM, Buyer may desire to place additional orders. Supplier shall provide Buyer with OEM or Supplier notification of obsolescence and offer a “Last Time Buy Notices”; at least (12) months before, or upon the initial receipt of OEM obsolescence notice. Last Time Buy Notice must be sent to Buyer prior to any action to discontinue purchase parts under a Contract or Purchase Order.

1. **DELEGATED INSPECTION/DOCK TO STOCK AUTHORITY:**
	* Delegated Inspection authority/Dock to Stock may be granted to a Supplier who has demonstrated the ability to consistently produce quality products in compliance with purchase order requirements and stated drawings and specifications, and the Supplier has been proven to comply with the quality requirements imposed.

* + Delegated inspection may commence only after written approval of the Supplier’s inspection procedure has been granted to the Supplier by PPG Aerospace Purchasing and Quality Assurance departments. Upon approval, the Supplier is responsible for performing all inspections associated with the specific parts/materials for which delegation has been granted.

* + Because PPG Aerospace may reduce or eliminate its receiving inspection for delegated inspection components or materials, it is imperative that all required Certificates for

Conformance and/or Test Reports accompany each shipment. These documents will be reviewed by PPG Aerospace Incoming Inspection to verify that the materials were inspected and found to be acceptable by the Supplier. Delegation will be retracted if there is evidence that the required inspection(s) are not being performed, or if significant quality issues are encountered.

* + Components manufactured to PPG Aerospace drawings, or PPG Aerospace Customer drawings, for which inspection authority has been delegated to the Supplier, shall include the supplier’s inspection stamp. If a component is too small for the identification format and inspection stamp, the same information may be recorded and stamped on a metal-ring tag and attached to the component.

**NOTE:** If the Supplier is provided an inspection stamp from PPG Aerospace, the PPG Aerospace stamp shall be used.

1. **CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT:**
	* The Supplier shall establish and maintain a process to control and maintain inspection, measuring, and test equipment used by the Supplier to demonstrate the conformance of product, processes or other inspection and measuring equipment to the specified requirements. The process shall define the plan for recall of measuring devices that require calibration, and the maintenance of calibration history records.

* + To assure continued accuracy, such devices shall be calibrated against certified standards which have known valid relationships to the National Institute of Standards and Technology (NIST). Devices used as acceptance media shall be clearly identified as to their calibration status. Compliance to ISO/IEC 17025 standard “General Requirements for the Competence of Testing Calibration Laboratories” is required.

* + The Supplier’s procedures shall define the system to access and determine if the validity of previous measuring results has been adversely affected when the measuring equipment is found not to conform to requirements and take appropriate action as necessary.

1. **INSPECTION AND TEST STATUS:**
	* The inspection and test status of product shall be identified throughout all stages of manufacture by authorized stamps on the product itself or on tags, labels, packaging, inspection records, or other suitable means. Stamps used for indicating acceptance of special processes must be specially designed to distinguish them from standard inspection stamps. Stamp design shall not resemble Government Inspection stamps.

* + The Supplier’s quality documentation shall include facsimiles of stamp impressions and describe the configuration, usage and control of each stamp.

1. **CONTROL OF NONCONFORMING MATERIALS AND PRODUCT:**
	* The supplier shall provide a procedure for control of nonconforming material and product. This procedure must provide for identification, segregation, and disposition of such articles, and prelude their use or intermingling with conforming articles.

* + Nonconforming material that cannot be reworked to print or specification may be submitted to PPG Aerospace for consideration. Requests for review of discrepant material must be forwarded to the PPG Aerospace Buyer to review with Quality and Engineering Departments for disposition, prior to shipment or delivery.

* + The request for review of discrepant material must contain sufficient detail for a technical evaluation, including engineering sketches, marked prints, and/or detailed rework instructions, and must include a positive corrective action statement outlining action taken by the Supplier to reduce to a minimum, or eliminate the condition. The PPG Aerospace Buyer will inform the Supplier of the final decision. The acceptance of nonconforming supplies is a prerogative of and shall be prescribed by PPG Aerospace.

* + The Supplier shall immediately notify the PPG Aerospace Buyer when a nonconformance is discovered in the Supplier’s processes or products that may affect product already delivered. Notification shall be within 24 hours of discovery and shall include:

* + - Clear description of the discrepancy
		- Parts affected (Part numbers, serial numbers, lot numbers, manufacturing dates, etc.)
		- Quantity Delivered
		- Delivery Dates
		- Corrective action for the nonconformance

1. **CORRECTIVE AND PREVENTATIVE ACTION:**
	* The Supplier shall provide an effective procedure for prompt and positive action to correct conditions that have resulted or could result in defective parts. Procedures shall provide for corrective and preventative action for both Supplier and subcontracted discrepant material, and for similar materials and processes that may be affected.

* + Corrective action is required of Suppliers who allow nonconforming supplies to be shipped to PPG Aerospace. When this occurs, PPG Aerospace will issue a Nonconformance form (CAIR) Correcting Adjustment/Incident reporting/Supplier Management.

This form and corrective action must be completed and returned to PPG Aerospace Supplier Quality department within the time limit shown on the form. The corrective action requires approval by PPG Supplier Quality and subsequent Supplier production must prove effectiveness of the corrective action.

* Site level SQEs are responsible for tracking and monitoring all CAIRs on a monthly basis and reporting CAIR status during the monthly metrics meeting (SQ KPIs). Most CAIRs close within 60 days. In the event, site SQEs are unable to obtain satisfactory corrective action from the supplier(s), CAIRs escalate to SQM and Procurement Manager. Team meetings are scheduled with the suppliers and relevant PPG members, set up to drive suppliers focus on root cause and corrective actions in a timely manner. In some cases, CAIRs may extend beyond 60 days, based on the ineffectiveness of the corrective/preventative actions. PPG and Supplier meetings will continue frequently to drive root cause analysis and corrective actions. If a CAIR date extends, the SQE will make notes within the CAIR system, identifying the reason and next actionable steps.

**NOTE:** For minor non-repetitive defects, an Alert will be issued to inform the Supplier of discrepancies to prevent possible recurrence. No written response is required; however, failure to implement positive corrective action will result in rejection of subsequent shipments.

1. **HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY:**
	* The Supplier shall establish and maintain a process to define the handling of product and

materials, in all areas of the Supplier’s facility, to prevent damage or deterioration.

* + The Supplier shall use designated storage areas or stock rooms to prevent damage or deterioration and unauthorized additions or removals of product awaiting delivery.

* + The Supplier shall control packing, packaging and marking processes (including materials used) to the extent necessary to ensure conformance to requirements specified on drawings, specifications and purchase orders.

* + The Supplier’s procedures shall define the identification and control of any age-sensitive materials, and include measures to recall and remove any materials from use that have exceeded their recommended shelf life. Supplier shall furnish the shelf life of material and current expiration date of shipment lot/batch on the material certification. All material supplied to PPG Aerospace must have at least 75% of shelf life remaining. Materials that require environmental controls shall be defined within the Supplier’s procedures.

* + The Supplier shall provide a procedure for control of preservation, packaging, and shipping processes to preclude damage or deterioration during transit. The supplier shall insure that shipments to PPG Aerospace contain the necessary packing list and certifications as prescribed by the purchase order (reference section 14). The Supplier shall furnish a CoC signed by the Quality Manager, or designate, with each shipment. Items contained in the shipment shall be identified on the CoC and serial/lot number.

* + Supplier shall follow contract and purchase order requirements for delivery, in the event that products and services are provided directly to the end use customer(s) by Supplier, on behalf of the Buyer.

1. **CONTROL OF QUALITY RECORDS:**
* The Supplier shall maintain adequate records of inspection, test, calibration and other quality assurance activities. The records shall provide objective evidence of the operations performed. The records shall be suitable in format, accuracy, and detail to permit analysis by management and for the initiation of specific corrective actions. Record retention shall be a minimum of 10 years, unless otherwise specified on the purchase order and shall be made available to PPG Aerospace upon request. Records may be in the form of hard copy or electronic media.

1. **INTERNAL AUDIT:**
* At least annually, the supplier shall conducts an internal audit of their quality system to ensure compliance.

* + - Method of documentation of audit check sheets and recording of audit results are at the discretion of the Supplier.
		- Any deficiencies identified shall have a corrective action plan documented.
		- Audit personnel shall be independent of supervision of the area(s) audited.
		- Management with executive responsibility shall review the internal audit results.
		- All internal audit records shall be retained in accordance with, Control Quality Records, and shall be available for review by PPG Aerospace.

1. **TRAINING:**
* The Supplier shall maintain procedures that provide for the training needs and a method for assessing and documenting the proficiency of all personnel performing activities that affect quality. Training records shall be maintained and retained per PPG Aerospace record retention requirement.

1. **SERVICING:**
* Not applicable, unless specified on purchase order/contract.

1. **STATISTICAL TECHNIQUES (when applicable):**
* When critical items, including key characteristics, have been identified, the supplier shall ensure they are controlled and monitored in accordance with the established processes. When suppliers are sampling inspection as a means of product acceptance, the sampling plan must be justified based on recognized statistical principles and appropriate for use (i.e.

matching the sampling plan to the criticality of the product and to the process capability).

1. **SUPPLIER RATING**
	* On Time Delivery (OTD) will be monitored as part of the Supplier Rating. Target OTD is 98%.
	* Ratings will be monitored with the Supplier Nonconformance Notification (SNN) process or (CAIR) Correcting Adjustment/Incident reporting/Supplier Management for either one of the below criteria:
* External provider deliveries adversely affecting PPG plant or customer disruption(s).
* And/or monthly, to three consecutive months of OTD at less than 75% (excluding PPG sites).
* Refer to Section 27 for Supplier Corrective Actions relative to defects or defective materials. All RTV (return to vendors) are process through the ERP system for monitoring and tracking purposes.
1. **RISK MANAGEMENT**

 The Supplier shall consider both internal and external forces that may affect or impact their organization’s ability to produce product; both positive and negative factors/conditions should be considered. The Supplier shall take into account any risk that may arise in in fulfilling purchase order requirements and how those risks relate to the quality management system(s). The Supplier shall plan and implement actions to address such risk and identify opportunities that allow the overall achievement of the quality system’s intended results. Risks or potential risks that could negatively affect conformity of products and services provided by the Supplier will be addressed through Corrective Action as follows:

* + - Avoid the risk (e.g. multiple suppliers, redesign, and review capabilities).
		- Mitigate, or reduce, the risk – take action to reduce the likelihood and/or impact of a given threat (e.g. FMEA, Inventory controls, supplier audits, cross training of resources and PMs).
		- Accept the risk – do nothing to affect the likelihood or impact of an event. If the threat materializes, the cost to implement risk controls will exceed the cost of repair/replacement.
		- Supplier shall notify PPG Aerospace buyer within 24 hours of any catastrophic event of any nature including, cyber-attacks that will disrupt their production, prevent shipments of parts, material and/or assemblies. Supplier shall submit a risk mitigation report to the PPG Aerospace Buyer within 48 hours of these events.

1. **CHANGE NOTIFICATION PROCESS**
	* Seller shall document a process for notifying Buyer of intended or actual changes described in the aforementioned requirements.

1. **PPG SUPPLIER DIVERSITY**
	* PPG believes that our corporation and our communities benefit from providing equal opportunities for diversity business enterprises to compete for PPG business. Our suppliers are our business partners, and it is important that these partnerships reflect the communities where we live, work and serve.

1. **CUSTOMER AUDITS**
	* From time to time, the customer may choose to conduct an on-site audit along with PPG Supplier Quality personnel.

**NOTE:** Supplier shall notify PPG buyer if they are unable to meet any of these requirements.

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|  **Revision** **Number** | **Date** | **Revised By** | **Pages Affected** | **Remarks** |
| 7.0 | 9/29/2020 | D. Amini | 5, 8, 11 | Corrected grammar issues, clause 14 wording changed for CoC & CoA, clause 22 added two bullets tied to obsolescence, clause 28 added last bullet "if" supplier ships direct to end-use customer. |
| 8.0 | 10/21/2020 | D. Amini | 13 | Section 34 Supplier Rating – adjusted SNN OTD metric. |
| 9.0 | 7-8-2022 | D. Amini | 11, 13, 14 | Added language section 27 and section 34. |
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