Template No.
CEMILAC_FFGP_ACP_03

Airworthiness Certification Plan (ACP) /Certification Basis(CB) for Non Metallic Material

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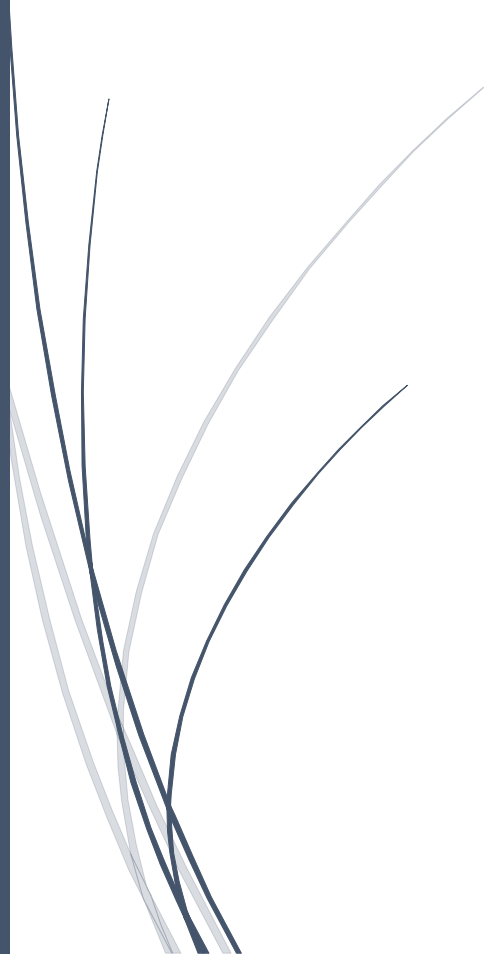

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Title:	**Project/System :**
Airworthiness Certification Plan (ACP) /Certification Basis(CB) for Non Metallic Material	< Project/System Name>
	LRU/System Part No.
	<No.>
	Critical Level
	<A/B/C/D/E>

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<Design Firm Name & Address>

Airworthiness Certification Plan (ACP) /Certification Basis(CB)

Non-metallic material <write the product nomenclature > developed and manufactured by < organisation name > to the specification .....

A. Step 1: Document requirements:

- Description of the product where the material will be used
- Indigenous requirement(s) projected by user HAL
- Duly filled Input data sheet Form 21E
- System Safety Analysis as per IMAP 2023
- Applicable international specification / QTS

B. Step 2:

The LTCC convened with all stakeholders to discuss the Certification basis, ACP, QTS, provisional PCD and clearance for non-critical items

For Critical Airborne Non-metallic items,

C. Step 3: Provisional approval of Process Control Document by CEMILAC

D. Step 4: Process verification and witnessing of Qualification testing to the applicable specification / QTS by TAA.

The important aspects / conditions of the product with respect to certification and usage to be documented in this ACP listed in Annexure-1 for compliance.

Failure Criteria:

In the event of one or more batches failing during testing, the LTCC meeting will be reconvened to determine the appropriate course of action for way forward.

E. Step 5: Process and test compliance report duly coordinated by DGAQA / Concerned QA of Indian Armed forces.

Upon satisfactory compliance to PCD and Specification/QTS provisional clearance will be issued by RCMA / CEMILAC.

F. Step 6: Functional Evaluation (Rig/ground Run (and/or) Flight trials):

The Non-metallic component approval for the relevant system-subsystem application/end use shall be dealt and issued by the Platform RCMA.

The Non-metallic material has been tested only to the test requirement of specification .....-; hence the User and platform RCMA before using the material for any end use application; shall carry out the end use related compatibility/functional tests like fluid immersion etc. as per the system requirement. The Non-metallic material selection for the component development / fabrication shall be as per the system/subsystem OEM recommendations.

The need for conduct of rig test / ground run tests (and/or) flight trials shall be decided by the user in co-ordination with user RCMA.

G. Step 7:

The necessary documents, including the type record as per IMAP-2023 and satisfactory performance feedback from end users, the Letter of Approval (LoA) to the specification/QTS will be issued by RCMA for the product.

H. Requalification:

CEMILAC reserves the right to require requalification of the product in the event of any modifications to the raw material, additive, source, manufacturing technology, or manufacturing location. The completion of this qualification will be determined at the discretion of CEMILAC.

Annerxure-1

The important aspects/conditions of the product with respect to certification and usage

1.0 Sampling Procedure for Final Testing of Product:

Standard sampling procedure is to be brought out.

2.0 Final Testing Of Product As Per Specification……, Issue No:00, Year:…

Three batches of the product shall be tested to the full specification requirements as per spec_____ / Qualification test schedule (QTS) Ref.___in NABL accredited Laboratory.

Before forwarding the samples to NABL Laboratory the following in house testing of basic parameters is carried out and ensured to meet the requirements as per specification / QTS.

i)Test 1

ii) Test 2

iii)Test 3 etc

2.1 Re-Sampling and Testing

- If any of test sample first selected FAIL to pass the mentioned test, two further samples from the same batch shall be selected for testing.
- If both these additional sample pass, the batch represented by the samples shall be considered as PASS.
- If any of these additional test samples FAIL, this shall be cause of rejection of the batches. Retesting shall be done with the knowledge of the Airworthiness agency/QA Agency.

3.0 Details of Packing and Identification

3.1 Packing

- The product shall be packed and supplied in suitable containers as agreed between the airborne user and manufacturer. Packing done by the manufacturer should not be removed till items are actually required for use.
- <Suitable package details shall be included by the manufacturer>
- Container make:
- Container Sealing:
- Capacity / Quantity:
- Other relevant details:

3.2 Identification of Packing:

Every packaging/Envelope shall be marked with at least the following information whatever applicable shall be visible from outside of the package without breaking the seal.

1. Product Name
2. Net Content / Quantity
3. Specification No.
4. Batch No.
5. Date of Manufacturing
6. Date of Retesting
7. Total Shelf Life
8. Consignee Details
9. Order No.
10. Name and address of the manufacturer
11. Quarter and year of cure (applicable for rubber compound)
12. Life grouping/ Category (if applicable and known)

4.0 Storage, Shelf Life, MSDS, Service Life:

(i) Storage:

- Temperature range:
- Max relative humidity:
- Other Storage conditions/stipulations to be followed by the User:

(ii) Shelf life:

The following life is applicable; if stored under conditions as stipulated by the manufacturer as mentioned in 4 (i) (with supporting documents)

- Initial Shelf life:
- Retest:
- Total Shelf life:

(i) MSDS: MSDS shall be prepared and submitted to TAA and User

(ii) Service life: Note: Recommended Service life of the product in actual end use application to be mentioned by the manufacturer along with supporting technical documents

5.0 RECORDS

a. Maintenance of Facilities

- Company shall keep records demonstrating the facilities used to produce, control, measure and test the respective product during approval.
- The facilities / testing equipment to be calibrated and the calibration record to be produced on demand by Company.

b. Process Sheet

- Company shall prepare, document and maintain the process sheets.

6.0 Certification

6.1 Issue of Provisional Clearance

Application by main contractor for provisional clearance along with Process compliance report (PCR) to process control document (PCD) & 3 batches test compliance report (TCR) to specification; both reports are to be duly witnessed and coordinated by DGAQA. Provisional clearance is valid for 2 years & may be extended for another 2 years if main contractor requests. Failing to convert to LOA (Letter of Approval) within 4 years will lead to Revoking the provisional clearance as per procedure stipulated by CEMILAC.

6.2 Issue of LOA (Letter of Approval)

Application by main contractor for LOA (Letter of Approval) with Form 21G along with type record, performance feedback report of the product (or) component made out of the subject product (for rubber compound) duly signed by main contractor / user and the DGAQA / competent QA authorities and batch test reports. LOA is valid for 10 years.

7.0 Traceability

All the batches produced at <Company name & address> for Defence supplies shall be traceable and available for verification by relevant authorities as and when required.

8.0 Rejection

Material not conforming to the specification / QTS/ ACP or to unauthorised modifications in process control documents will be subject to rejection.

9.0 OTHER RELEVANT DETAILS AS DECIDED BY TAA

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