

**गुणवत्ता प्रभाग नोदक एवं रसायन /QUALITY DIVISION PROPELLANTS & CHEMICALS  
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विक्रम साराभाई अन्तरिक्ष केंद्र/VIKRAM SARABHAI SPACE CENTRE  
तिरुवनंतपुरम-695022/THIRUVANANTHAPURAM – 695022**



### **Quality Assessment Report**

<b>Product</b>	<b>Product-A</b>
<b>Batch Nos.</b>	<b>Div-1/Product-A/0116/2024 to Div-1/Product-A/0120/2024 (5 batches)</b>

प्रस्तुतकर्ता Prepared by	Engineer-1 Engineer-2	
समीक्षाकर्ता Reviewed by	Section Head	
अनुमोदनकर्ता Approved by	Division Head	

#### **Circulation List:**

To	Person-1	
Cc	Person-2	Person-4
	Person-3	Person-5

## 1. Product Identification

**Product Name:** Product-A

B. No.	D.O.M	D.O.E	Batch Size, g
Div-1/Product-A/0116/2024	27.07.2024	26.07.2025	2250
Div-1/Product-A/0117/2024	27.07.2024	26.07.2025	2310
Div-1/Product-A/0118/2024	27.07.2024	26.07.2025	2260
Div-1/Product-A/0119/2024	25.08.2024	24.08.2025	2225
Div-1/Product-A/0120/2024	25.08.2024	24.08.2025	2230

## 2. References

- 2.1. Process document for product-A, Document No: ABCD/DiV2/PD/01/2021 dated July 2021
- 2.2. Log sheets from Div-1

## 3. End use: For PSLV launch vehicle (Specific use)

## 4. Assessment by review forums

- 4.1. Remark-1
- 4.2. Remark-2
- 4.3. ---
- 4.4. ---

## 5. QA observation and remarks

- 5.1. Raw materials used in the processing product-A were analysed as per Ref. 2.1. Properties of all the raw materials meet the specification. (Ref. Annexure-I)
- 5.2. Processing of all the batches was carried out at as per Ref 2.1.
- 5.3. Acceptance of the product were carried and the test results meet the specification (Ref Annexure-III A).
- 5.4. Comments regarding and NCs and NC management, if any
- 5.5. Remark-1
- 5.6. Remark-2

## 6. Non-conformances:

- 6.1. NC-1
- 6.2. NC-2

## 7. Storage Condition:

- 7.1. As the product is moisture sensitive, it is to be stored in airtight containers under dry nitrogen/dry argon blanket and kept in ambient condition.

## **8. QA Recommendation**

- Recommendation-1
- Recommendation-2

## **9. Pending actions**

- Actions-1
- Actions-2

## **10. Disposition**

- Product-1 with batch nos. Div-1/Product-A/0116/2024 to Div-1/Product-A/0116/2024 (5 batches)**  
are cleared for further use.
- The following points are to be noted:**
  - Note-1**
  - Note-2**
  - Note-3**

**Annexure-I****Acceptance test of raw materials**

Sl. No.	Parameters	Specification	Test Results	Test report reference No.
1	<b>RM-1</b>			
	Acceptance test-1	Colourless liquid	Colourless liquid	-----
	Acceptance test-2	60 - 70	58.7	4S89XCV, Dt: 29.07.2024
	Acceptance test-3	< 0.5	0.08	
2	<b>RM-2</b>			
	Acceptance test-1	Colourless viscous solid	Colourless viscous solid	-----
	Acceptance test-2	1300 - 1500	1437	5S90XCV, Dt: 29.04.2024
	Acceptance test-3	<1.0	0.19	
3	<b>RM-3</b>			
	Acceptance test-1	Colourless solid	Colourless solid	-----
	Acceptance test-2	1220 - 1260	1230	8X62FGH, Dt: 30.08.2024
4	<b>RM-4</b>			
	Acceptance test-1	Colourless to pale yellow liquid	Colourless liquid	
	Acceptance test-2	≥98	99.4	146129, Dt: 29.05.2024
	Acceptance test-3	1.21 – 1.24	1.22	146128, Dt: 03.06.2024
	Acceptance test-4	1.5660-1.5680	1.5657	149713, Dt: 05.09.2024
	Acceptance test-5	80±2% 20±2%	78.7 21.3	QSDF/1258924, Dt: 17.06.2022
5	<b>RM-5</b>			
	Acceptance test-1	Colourless to pale yellow liquid	Colourless liquid	
	Acceptance test-2	≥ 99	99.8	145799, Dt: 27.05.2024
	Specific gravity@25 °C	1.06 – 1.09	1.06	145802, Dt: 09.05.2024

**Annexure-IIIA****Acceptance test of products Properties**

Sl. No.	Batch No.	Test Results (Measured in-house)	
		Acceptance test-A, Spec.: $<1 \times 10^6 \Omega/\square$	Acceptance test-B (Spec.: 20 – 24 Sec)
1	Div-1/Product-A/0116/2024	$10^5, 10^5, 10^5$	23.37, 21.60, 21.73
2	Div-1/Product-A/0117/2024	$10^5, 10^5, 10^5$	21.35, 22.62, 22.81
3	Div-1/Product-A/0118/2024	$10^5, 10^5, 10^5$	22.75, 22.83, 21.92
4	Div-1/Product-A/0119/2024	$10^5, 10^5, 10^5$	22.90, 20.91, 22.91
5	Div-1/Product-A/0120/2024	$10^5, 10^5, 10^5$	21.82, 21.89, 21.80
6	Div-1/Product-A/0116/2024	$10^5, 10^5, 10^5$	22.88, 24.90, 23.90

**Annexure-IIIB**

Sl. No.	Batch No.	Acceptance test-C Spec.: $0.55 \pm 0.05$	Test Report Ref. No.	Acceptance test-D Spec.: $0.55 \pm 0.05$ Spec.: 0.8(min)	Test Report Ref. No.
1	Div-1/Product-A/0116/2024	0.56, 0.58	SMAS/254512 Dt:08.11.2024	0.90, 0.89	DIV-10/Emi/2223/2024 Dtd.10.11.2024
2	Div-1/Product-A/0117/2024	0.55, 0.57	SMAS/661212 Dt:08.11.2024	0.88, 0.91	
3	Div-1/Product-A/0118/2024	0.54, 0.58	SMAS/578951 Dt:08.11.2024	0.87, 0.90	
4	Div-1/Product-A/0119/2024	0.60, 0.57	SMAS/296686 Dt:08.11.2024	0.91, 0.89	
5	Div-1/Product-A/0120/2024	0.61, 0.57	SMAS/486321 Dt:08.11.2024	0.84, 0.87	
6	Div-1/Product-A/0116/2024	0.56, 0.57	SMAS/866896 Dt:08.11.2024	0.85, 0.88	