

FINISHED GOOD Q. C. TEST REPORT FOR SPECIALITY CHEMICALS

Product Name : RL-SG65 Manufacturing Date : 23/01/26
 AR No. : R1061FG1 01674 Approval Date : 28/01/26
 Batch No. : 10012601674 Packing Details : 5000 kg x 01
 Quantity : 59.00 KGS Exp. Date = 22/07/26

Sr. No.	Test Parameters	Results
1	Physical Appearance	Amber color visc. liquid
2	Viscosity	78 cP
3	PH	3.70
4	Specific Gravity @ 25 °C	1.060
5	Solid Content / Active %	17.92%
6	Ionicity	Cationic
7	Charge	0.023 Meq/lit
8	Solubility	Soluble in water
9	Turbidity	1.4 NTU
10	Color Gardner	NA
11	Presence of Grains / Gel	Absent
12	Stability Test / Boring Test	PASS
13	Performance Test / Cobb Value	NA
14	Tensile Strength Test / Chloride Content	7.24 N

RESULT : APPROVED / REJECTED BY QC
REMARKS : V.I.D High viscosity
Analyzed By / Date
QC Executive
01/01/26
Approved By / Date
QC Manager / Incharge
 FORM NO. SR-12-06, Rev : 00

28/01/26

No. 74
17
Rishabh RISHABH METALS & CHEMICALS.PVT. LTD.
Metals & Chemicals Pvt.Ltd.

SPECIALITY CHEMICALS MANUFACTURING DIVISION
PRODUCTION REPORT

DT 23/11/26

Sr.No.	Name of the Product	Batch Number	Batch Size (Kgs.)	Quantity Produced (Kgs.)	Packing Details
1)	RL-5065	100126 01674	6000	5900	<p>→ Hold in PIZP mixing = 5900 kgs x 0.1 m = 5900 kg <u>mixing Details</u> RL-9063 10012601614 = 2443 10012601642 = 2063 10112501235 = 0.493</p>

Prepared by

(PF)
23/11/26

Production Supervisor

Reviewed by

(DP)
23/11/26

Production Manager

Format No. QAD / RJ / DR-07 / F / 002

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RISHABH METALS & CHEMICAL PVT LTD.

TITLE: WORKSHEET FOR POLYMER PRODUCT

DOCUMENT NO.	POLY/01/00	REVISION NO.	03
EFFECTIVE DATE :	01/10/2025	NEXT REVISION DUE	30/09/2028

DATA SHEET

Product Code:	RL - 5065	AR. No.	R/261FGH 01674
Batch No.	10012601674	No. of containers / packs	5900 kg 200
Batch Quantity	5900 kg	Sampled quantity	500 ml
Sampling date	24/01/26	Date of Analysis	24/01/26
Analyzed by	AP	Released Date	28/01/26

Sr. No.	Test	Results
01	Physical Appearance	Observation: Amber color visc. liquid Complies / Does not complies
02	Viscosity	Observation: 78 CPS Complies / Does not complies
03	pH	Observation: 3.70 Complies / Does not complies
04	Specific Gravity	Observation: 1.060 Complies / Does not complies
05	Solubility	Observation: Soluble in water Complies / Does not complies
06	Ionicity	Observation: cationic / Anionic / Non ionic Complies / Does not complies
07	Turbidity	Turbidity = 1.21 NTU Complies / Does not complies

Analyzed By / Date:	Checked By / Date:
28/01/26 AP	28/01/26

Prepared By	Reviewed By	Approved By
AP 26/09/2025	Parbat Ray 26/09/2025	Chirag Patel 26/09/2025 QA Head EN RNP

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TITLE: WORKSHEET FOR POLYMER PRODUCT

DOCUMENT NO.	POLY/01/00	REVISION NO.	03
EFFECTIVE DATE :	01/10/2025	NEXT REVISION DUE	30/09/2028

08	Charge	$\frac{BR \times 0.001 \times 1000}{10 \text{ ml}} = \frac{23 \times 0.001 \times 1000}{10 \text{ ml}} = 0.23 \text{ meq/liter}$															
09	Solid Content	<p>(I) Dish ID : (a)</p> <p>Weight of empty Dish (Y) 36.1296 gm</p> <p>Weight of Dish + Sample (X) 40.0100 gm</p> <p>Weight of sample (X-Y) = (Z) 6.8804 gm</p> <p>Weight of dried Sample with dish = (A) 37.3597 gm</p> <p>Net weight of dried Sample (A-Y) = (C) 1.2301 gm</p> $SC = \frac{(C/Z) \times 100}{6.8804} = 17.88 \%$ <p>(II) Dish ID : (b)</p> <p>Weight of empty Dish (Y) 35.4090 gm</p> <p>Weight of Dish + Sample (X) 41.1270 gm</p> <p>Weight of sample (X-Y) = (Z) 5.7180 gm</p> <p>Weight of dried Sample with dish = (A) 36.4354 gm</p> <p>Net weight of dried Sample (A-Y) = (C) 1.0264 gm</p> $SC = \frac{(C/Z) \times 100}{5.7180} = 17.95 \%$ <p>Avg. = $\frac{17.88 + 17.95}{2} = 17.92 \%$</p> <p>L Complies / Does not complies</p>															
10	Stability	<p>24 / 72 Hrs. at 80°C</p> <table border="1"> <thead> <tr> <th>Hours</th> <th>pH</th> <th>Viscosity</th> </tr> </thead> <tbody> <tr> <td>Initial</td> <td>3.70</td> <td>78 CPS</td> </tr> <tr> <td>32 hr</td> <td>4.01</td> <td>56 CPS</td> </tr> <tr> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Hours	pH	Viscosity	Initial	3.70	78 CPS	32 hr	4.01	56 CPS	-	-	-	-	-	-
Hours	pH	Viscosity															
Initial	3.70	78 CPS															
32 hr	4.01	56 CPS															
-	-	-															
-	-	-															

Analyzed By / Date:	Checked By / Date:
28/01/26	28/01/26

Prepared By	Reviewed By	Approved By
26/09/2025	27/09/2025	27/09/2025
Department Representative	Department Head	QA Head

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TITLE: WORKSHEET FOR POLYMER PRODUCT

DOCUMENT NO.	POLY/01/00	REVISION NO.	03
EFFECTIVE DATE :	01/10/2025	NEXT REVISION DUE	30/09/2028

11	Test	Results	
		①	②
	Other Test	Grains / Gel = Absent	
		Wet strength = 7.21 N	

The product complies / under deviation / not complies to the specification

Remark: Approved / Rejected -

Analyzed By / Date	Reviewed By / Date	Approved By / Date
28/01/26	28/01/2026	28/01/2026

Prepared By	Reviewed By	Approved By
LP 26/09/2025	Amber 27/01/2025	Chirag Patel 29/01/2025
Department Representative	Department Head	QA Head

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23/01/26

MASTER COPY**Rishabh**
Metals & Chemicals Pvt. Ltd.**RISHABH METALS & CHEMICALS PVT.LTD****ACCEPTANCE UNDER DEVIATION FOR RAW MATERIAL/
FINISHED PRODUCTS/PACKING MATERIAL**Name of RM/FP/PM: RL-5065Supplier Lot No. /Batch No: 10012601674Quantity: 5900 kgIMI/ A.R No: A126/FG101674Vendor/Supplier Name: RMCDLDate of Testing: 28/01/26

Parameters	Std.Specification	Inhouse RM specification	Test Results	Remarks
<u>Viscosity</u>	<u>20 TO 80</u>	<u>30 TO 70</u>	<u>78 CPS</u>	<u>complies with S.I./ specs but not complies with inhouse spec</u>
			<u>NA</u>	

Kindly permit acceptance of the RM/FP/PM materials under deviation in respect of the above properties.

Approved By: QCM

Signature: (Signature)Date: 28/01/2026

Preapproval By : QAM

Signature: (Signature)Date: 30/01/2026

Approved By: ED

Signature:

Date:

Form No : RR-14-04, Rev: 00

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Quality Control Module

[| Main Page |](#)

- **Product Specification >> 5065322C >> 5065**

Shelf Life : 6 Months					
No.	Selected Parameters	Factory Specifications	Marketing Specifications	Unit	Test Method
1	Charge	0.15 To 0.25	0.15 To 0.25	Meq/lit	By Charge Analyser
2	Ionicity	Cationic	Cationic		By Chemical analysis
3	pH (of 2% solution)	3 To 4	3 To 7	-	By pH meter
4	Physical Appearance	Light yellow to amber color clear to hazy viscous liquid.	Light yellow to amber color clear to hazy viscous liquid.		Visually
5	Presence of Grains/Gel	Should be Absent	-	-	By filtration
6	Solid Content	17.2 To 18	16 To 18	%	By Loss on Drying
7	Solubility	Soluble in water	Soluble in water		By Solubility test
8	Specific Gravity @ 25°C	1.04 To 1.06	1.02 To 1.06		By Hydrometer
9	Stability (Polymer)	Within \pm 10% of initial specs after 24 hrs at 80°C	Within \pm 10% of initial specs after 24 hrs at 80°C		BY STABILITY TEST
10	Turbidity.	< 12		NTU	By Turbidity Meter
11	Viscosity	30 To 70	20 To 80	cps	Viscometer
12	Wet Strength (Performance Test)	Not less than 7.0	-	N	By Strength Tester

Special Instructions : Not Entered ...

B-No : - 10012601674

(1)
28/01/26



Quality Control <quality@rmc.in>

Wet & % Wet Strength Of 5065

1 message

- Research Development <rd@rmc.in>

Sat, Jan 24, 2026 at 2:22 PM

To: Jitendra Choudhari <am-qc@rmc.in>, Quality Control <quality@rmc.in>

Cc: Sanjay Maske <am-rd@rmc.in>, Chandrashekhar Patil <chandrashekhar.p@rmc.in>, Sachin Maniyar <maniyar@rmc.in>, Srinivasan R <srinivasan.r@rmc.in>

Sr.No.	Sample Name	Batch No.	Dose	GSM	Strength In Newton	% Wet Strength Ratio
1	5065	10012601674	6Kg/T	61.57	7.21 N	25.31
2	5065	10012611675	6Kg/T	61.00	7.16 N	25.39

Thanks & Regards,
R & D Dept.
Siddarth Carbochem Products Ltd.

R12
RISHABH METALS & CHEMICALS PVT. LTD.

STORES REQUISITION SLIP POLYMER PLANT

B. No.: 10012601674

Date: 21/11/2026

2452

Product Name: PL 5065

Batch Capacity: 6000

Kgs.

Sr. No.	Particulars	Qty. Required Kgs.	Issued Qty. Kgs.	Suppliers Lot No. IMI No. / A.R.No.	Remarks
1	<u>PL 9163</u>			<u>PL 9163</u>	
2	<u>10012601614</u>	<u>2111 k,</u>	<u>2111</u>	<u>10012601614</u>	
3	<u>10012601647</u>	<u>706 k,</u>	<u>706</u>	<u>10012601647</u>	
4	<u>10112501235</u>	<u>0.119 k,</u>	<u>0.43</u>	<u>10112501235</u>	
5					
6					
7	<u>2022</u>	<u>223.224</u>	<u>223.22</u>	<u>PL 9163</u> 1151	
8					
9					
10	<u>2092 I HCl</u>	<u>102.96 k,</u>	<u>102.96</u>	<u>PL 9163</u> 1158	
11					
12	<u>2110</u>	<u>297.024</u>	<u>297.02</u>	<u>PL 9163</u> 10388	
13					
14					
15	<u>2549</u>	<u>0.1119 k,</u>	<u>0.114</u>	<u>PL 9163</u> 10375	
16					
17					
18	IBC Tank				
19	200 Lt. Barrel				
20	50 Kg. Carboy			<u>NA</u>	
21	35 kg. Carboy				
22	25 kg. Bag				

MR
Issued By
11/11/26

(P)
21/11/26
 Production In-charge /
 Production Executive

ARV
21-01-26

Received By
 Form No.:SR-20-08;Rev:00

RISHABH METALS & CHEMICALS PVT. LTD.
 MSME - UDYAM-MH-14-0001788
 E-3, M.I.D.C.Area, JALGAON - 425003
 (Additional Place of Business)

Gat No.213, Bambhori - 425002
 Tal- Dharangaon, Dist- Jalgaon (MS)
 Maharashtra - 425001, India
 CIN: U24110MH1983PTC030239

Issue -Mtrl Voucher

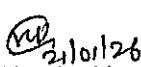
No. : 25-26/3578

Dated : 21-Jan-26

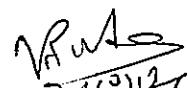
Ref.: 10012601674 dt. 21-Jan-26

Item Name	Godown	Batch/Lot	Quantity
Source (Consumption)			
9063	Finished Goods - Approved	10012601614	244.000 Kgs
		12-Jan-26	11-Jan-27
9063	Finished Goods - Approved	10012601647	706.000 Kgs
		19-Jan-26	18-Jan-27
9063	Finished Goods - Approved	10112501235	0.490 Kgs
		17-Nov-25	16-Nov-26
7028	Raw Material G 3 - Approved	R-260102-1329-ARN-1151	273.270 Kgs
		17-Jan-26	16-Jan-27
7093	Raw Material G 3 - Approved	R-260102-1329-ARN-1108	103.960 Kgs
		2-Jan-26	1-Sep-27
7110	Raw Material G 3 - Approved	R-251124-1123-ARN-0888	49.510 Kgs
		24-Nov-25	23-Nov-26
7110	Raw Material G 3 - Approved	R-251222-1266-ARN-1052	247.520 Kgs
		20-Dec-25	19-Jun-26
7599	Raw Material G 3 - Approved	R-250202-0325-ARN-0548	0.149 Kgs
		23-Sep-25	10-May-26
			1,624.899 Kgs

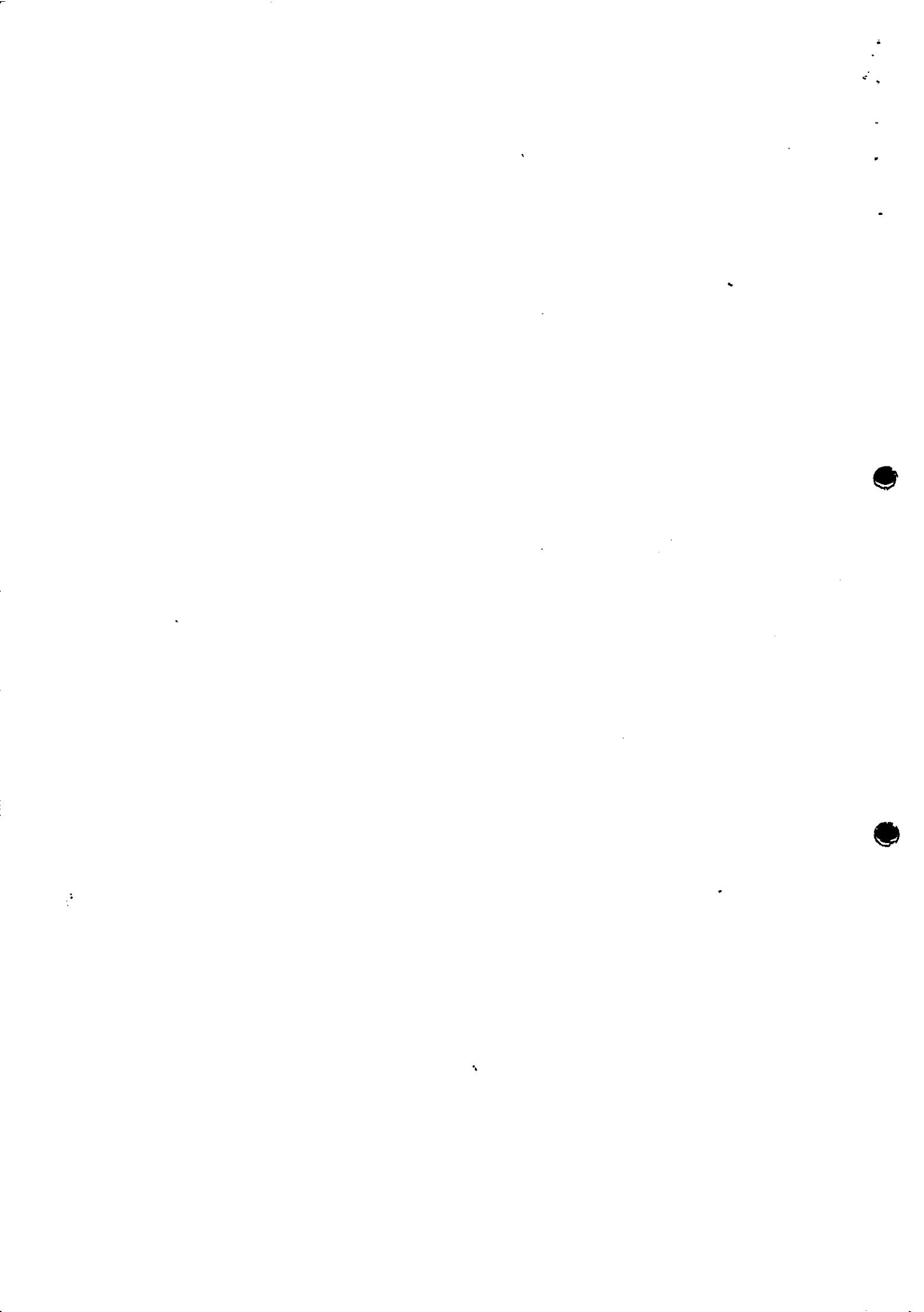
Narration: 10012601674:RL 5065:BC 6000:Date:-21.01.2026


 Checked by
 21/01/26

Verified by


 21/01/26


 ARN
 21-01-26
 Authorised Signatory



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0000-1002601674



Metals & Chemicals Pvt. Ltd.

RISHABH METALS AND CHEMICALS PVT. LTD.

STANDARD OPERATING PROCEDURE

SOP NO.: SOP/ 5065, REVISION: 02

NAME OF PRODUCT: 5065

EFFECTIVE DATE: 31/03/2023

Page 01 of 06

1. SCOPE

This Procedure is Applicable to the Manufacturing and Packing for the F.G. Product 5065.

1.1 STANDARD RECIPE

S.N.	RAW MATERIAL NAME	QTY (KGS)	RECIPE %	REMARKS
01	9063	1600	15.84	
02	7048	7365	72.92	
03	7028	460.0	4.554	
04	7053/ 7093	175.0	1.732	
05	7110	500.0	4.950	
06	7599	0.252	-	
	Batch Input/ Theoretical Capacity	10100 Kgs	100 %	
	Batch Output/ Practical Yield	10000 Kgs		
	Output Yield Range in Kgs	9900 - 10100		
	Output Yield Range in Percentage	98 - 100		

1.2 BATCH RECIPE

S.N.	RAW MATERIAL NAME	QTY (KGS)	SOLID %	REMARKS
01	9063	1600	7.921	950.49 kg
02	7048 (First Lot)	154.0	-	91.48 kg
03	7028	460.0	4.532	293.27 kg
04	7048 (Second Lot)	2131	-	1285.94 kg
05	7048 (Third Lot)	2131	-	1285.94 kg
06	7053/ 7093	175.0	0.520	103.94 kg
07	7048 (Fourth Lot)	2131	-	1285.94 kg
08	7048 (S.C. Adjust)	818.0	-	585.94 kg
09	7110	500.0	4.925	297.03 kg
10	7599	0.252	-	0.149 kg
	Batch Input/ Theoretical Capacity	10100 Kgs	17.90	

Cap :- 6000 kg

PREPARED BY	CHECKED BY	APPROVED BY
IN-CHARGE (PRODUCTION)	MANAGER (PRODUCTION)	MANAGER (Q.A.)
28/03/2023	22/03/2023	30/03/2023

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RISHABH METALS AND CHEMICALS PVT. LTD.

STANDARD OPERATING PROCEDURE

SOP NO.: SOP/ 5065, REVISION: 02

NAME OF PRODUCT: 5065

EFFECTIVE DATE: 31/03/2023

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2. PRE OPERATING PROCEDURE

2.1 IMPORTANT NOTES

1. Make sure each batch of the same Product shall be manufactured by these Standard Operating Procedures.
2. Before starting the batch, read SOP carefully, and then start the batch as per given Instructions.
3. Strictly follow given SOP procedure during batch process and note down each activities in B.M.R.
4. Use only Blue Ball Pen for filling the B.M.R. & Checklist and Note all activity with clearly readable handwriting.
5. Any sample drawn for Lab Trial must be note down in B.M.R.
6. Take Gross Weight and Tare Weight of barrels/ carboys of Raw Material and note down in B.M.R.
7. While removing the Sample, always use all required Safety Equipment (PPE) like Hand Gloves, Safety Goggles and Safety Shoes Etc. and strictly follows all necessary Safety Precautions.
8. All In-House testing (Like Clarity, Color, Grains Etc.) must be properly note down in B.M.R.
9. All activities after Batch Finalization like 7048 addition, RM Addition, Sample Checking Etc. must be note down in the B.M.R. with time.
10. "Precautions/ Cautions/ Note" shall be written in Bold in the remarks columns of B.M.R.
11. In Process/ Process Parameter shall be clearly mentioned in the B.M.R.
12. Each B.M.R. shall be prepared by Production Operator, Checked by Production In-Charge/ Executive and Reviewed by Production Manager thereafter handed over to Q.A.

2.2 PRE CHECKS

1. Before starting the batch, ensure that all Raw Materials are approved by Q.C. and Note down their AR/ IMI Number in B.M.R.
2. Ensure all the raw materials are within required specifications and there after start the batch.

PREPARED BY	CHECKED BY	APPROVED BY
	29/03/23	30/03/23
IN-CHARGE (PRODUCTION)	MANAGER (PRODUCTION)	MANAGER (Q.A.)
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Metals & Chemicals Pvt. Ltd.

RISHABH METALS AND CHEMICALS PVT. LTD.**STANDARD OPERATING PROCEDURE**

SOP NO.: SOP / 5065, REVISION: 02

NAME OF PRODUCT: 5065

EFFECTIVE DATE: 31/03/2023

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3. Before starting the batch, ensure that the pH Meter is calibrated.
4. Ensure the reactor is Clean, Empty & Proper working condition.
5. Ensure that reactor receiver water properly drain out.
6. Ensure all moving Parts like Agitator, Motor, Gearbox are in good condition and working normally.

2.3 PRE OPERATING STEPS

1. Clean the Reactor completely and this is to be ensured by Production In-Charge/ Executive and note down in B.M.R.
2. Ensure that the bottom valve of Reactor should be closed.
3. Empty out the Reactor Jacket, if required.
4. Weigh and Shift all Raw Materials near Reactor.

3. STANDARD OPERATING PROCEDURE**3.1 BATCH OPERATING PROCEDURE**

- 1) Close Manhole of the reactor.
- 2) Close bottom valve of reactor.
- 3) Start Vacuum Pump and open reactor vacuum pipe valve for charging the material.
- 4) Charge 9063 as per batch recipe at RT by vacuum from pre-weighed barrel or carboy to the reactor.
- 5) Start reactor stirring.
- 6) Then add 7048 1st Lot from DM Water storage tank to reactor as per batch recipe at RT.
- 7) Start cooling tower water circulation to reactor jacket and cool up to room temperature.
- 8) When the temperature reaches at RT then start chilled water circulation.
- 9) Start 7028 addition at 20°C and control the temperature near 20-25°C. Try to complete the addition within 4 hour - 4:30 hour.

NOTE: 7028 addition time may vary depend upon chilling water.

PREPARED BY	CHECKED BY	APPROVED BY
IN-CHARGE (PRODUCTION)	MANAGER (PRODUCTION)	MANAGER (Q.A.)
28/03/2023	29/03/2023	30/03/2023

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RISHABH METALS AND CHEMICALS PVT. LTD.

STANDARD OPERATING PROCEDURE

SOP NO.: SOP/ 5065, REVISION: 02

NAME OF PRODUCT: 5065

EFFECTIVE DATE: 31/03/2023

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- 10) After complete addition of 7028, stop chilled water circulation and drain reactor jacket. Temperature increases automatically up to 30°C.
- 11) In case temperature goes beyond 30°C, open CT water inlet valve for 1-2 minutes and drain out water.
- 12) Once temp. goes to 30°C, start maintained the batch near temp. $30^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for next 2 hour.
- 13) After 02 hour maintaining, add 7048 2nd Lot as per batch recipe at batch temp.
- 14) After addition, start heating and increase the temp. up to 50°C.

NOTE: During increasing the temp. check viscosity continuously, whenever viscosity increase above 40 cps, start slowly addition of 7048 3rd Lot.

- 15) Once temp. goes to $50^{\circ}\text{C} \pm 2^{\circ}\text{C}$, maintain the batch for 1 hour at same temp.

NOTE: If viscosity not increases above 40 cps during temp. increasing as per point 13, then whenever viscosity increase above 40 cps during batch maintaining, start slowly addition of 7048 3rd Lot.

- 2) During addition of 7048 3rd Lot, if viscosity drops down below 40 cps, then stop 7048 3rd Lot addition and continue maintaining & wait to viscosity rises to 40 cps.

- 16) After 01 hour batch maintaining at $50^{\circ}\text{C} \pm 2^{\circ}\text{C}$, increase the temperature using hot push at $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$ & once temp. goes to 60°C , maintain the batch for 1 hour at same temp.

NOTE 1) If viscosity not increases above 40 cps during temp. maintaining as per point 15, then whenever viscosity increase above 40 cps, again start slowly addition of 7048 3rd Lot.

NOTE 2) During addition of 7048 3rd Lot, if viscosity drops down below 40 cps, then stop 7048 3rd Lot addition and continue maintaining & wait to viscosity rises to 40 cps.

- 17) After 01 hour batch maintaining at $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$, increase the temperature using hot push at $70^{\circ}\text{C} - 75^{\circ}\text{C}$ & once temp. goes to $70^{\circ}\text{C} - 75^{\circ}\text{C}$, maintain the batch for 1 hour at same temp.

NOTE 1) If viscosity not increases above 40 cps during temp. maintaining as per point 15, then whenever viscosity increase above 40 cps, again start slowly addition of 7048 3rd Lot.

PREPARED BY	CHECKED BY	APPROVED BY
(P) 28/03/2023	28/03/23	W 28/03/23
IN-CHARGE (PRODUCTION)	MANAGER (PRODUCTION)	MANAGER (Q.A.)

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21/01/26



STANDARD OPERATING PROCEDURE

SOP NO.: SOP/ 5065, REVISION: 02
EFFECTIVE DATE: 31/03/2023NAME OF PRODUCT: 5065
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NOTE 2) During addition of 7048 3rd Lot, if viscosity drops down below 40 cps, then stop 7048 3rd Lot addition and continue maintaining & wait to viscosity rises to 40 cps.

- 18) After 1 hour maintaining near temp. 70°C - 75°C then start again batch maintaining for next 5 hour at same temp.

NOTE : After 5 hour maintaining, if batch not finalized then cool down the bath and wait for further instruction.

- 19) If batch viscosity increases, control the viscosity to rise gradually up to 40 cps & again start slowly remaining addition of 7048 3rd Lot.
- 20) After complete addition of 3rd lot, batch viscosity rises up to 500 to 800 cps at as it is temp.
- 21) When viscosity goes to 500 to 800 cps, add 7048 4th lot and 7053/ 7093 simultaneously at batch temp as per batch recipe.
- 22) Start cooling tower water circulation and cool down the batch at RT.
- 23) Start 7048 addition for solid adjustment as per batch recipe at RT.
- 24) Add 7110 as per batch recipe in the reactor at RT.
- 25) Remove sample form reactor slowly and check required parameter at RT in house or get it checked by Q.C.
- 26) Once all parameter matches with below specifications, Add 7599 to the final material as per batch recipe.
- 27) Filter batch through fine filter cloth or filtration system and pack as per packing requirement.
- 28) Note down final yield, testing results, packing details and all activities in B.M.R.
- 29) Prepare production slip & send to Q.C.

PREPARED BY	CHECKED BY	APPROVED BY
IN-CHARGE (PRODUCTION)	MANAGER (PRODUCTION)	MANAGER (Q.A.)
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Issued by
21/01/26

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SOP NO.: 5065, REVISION: 02

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Metals & Chemicals Pvt. Ltd.

RISHABH METALS AND CHEMICALS PVT. LTD.

STANDARD OPERATING PROCEDURE

SOP NO.: SOP/ 5065, REVISION: 02

NAME OF PRODUCT: 5065

EFFECTIVE DATE: 31/03/2023

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3.2 AIM FOR 5065 PRODUCT SPECIFICATIONS AT 25°C

S.N.	PARAMETER	SPECIFICATION LIMITS
1	Physical Appearance	Light yellow to amber color clear to hazy viscous liquid.
2	Viscosity	20 - 80 cps
3	pH	3 - 7
4	Specific Gravity @ 25°C	1.02 - 1.06
5	Solid Content	17.2 - 18.0 %
6	Turbidity	< 12 NTU

4. PACKING OF MATERIAL

1. HDPE Blue Color Barrels, Carboys or Transparent I.B.C. shall be used for Packing and Note down Proper Packing Detail in B.M.R. & Packing Checklist.
2. After total batch unloading, clean reactor properly and all equipment like motor, gearbox, reactor valve, and agitator must be closed.

5. RESPONSIBILITY

01	Preparation of B.M.R.	Operator/ Supervisor – Production
02	Checking of B.M.R.	Executive/ In-Charge – Production
03	Review of B.M.R.	Manager – Production
04	Review of B.M.R.	Executive – Q.A.
05	Approval of B.M.R.	Manager – Q.A.

6. REVISION HISTORY

REVISION NO.	EFFECTIVE DATE	DESCRIPTION OF CHANGE
00	04/12/2020	NEW SOP
01	04/05/2021	In batch recipe, 7048 qty. revised
02	31/03/2023	1. In batch recipe, replace 7004 as 7110 due high pricing of 7004. 2. Recipe revises for resolving the BNPM.

PREPARED BY	CHECKED BY	APPROVED BY
 28/03/2023	 28/03/2023	 30/03/2023
IN-CHARGE (PRODUCTION)	MANAGER (PRODUCTION)	MANAGER (Q.A.)

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21/01/26

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Metals & Chemicals Pvt. Ltd.

RISHABH METALS AND CHEMICALS PVT. LTD.

BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV : 01

B.M.R. Form No.: RR-08-94, REV : 01	B.M.R. Page No.: 01 of 08	BMR Effective Date: 31/03/2023
Refer SOP: SOP / 5065 REV : 01		Supersedes: REV : 00
Process Start Shift : <u>S+st</u>	BATCH SUMMARY SHEET	Equipment Tag No.:
Process Completion Shift: <u>S st</u>	Batch Start Date & Time : <u>22/01/26</u>	BATCH NUMBER
Total Time Cycle (Hrs) : <u>25:45</u>	Completion Date & Time: <u>23/01/26</u>	<u>000-10012601674</u>

Batch Reconciliation

Input Caps. (Kgs)	Output Caps. (Kgs)	Total Loss (Kgs)	Actual Yield Percentage	Theoretical Yield Percentage
<u>6000 kg</u>	<u>5900 kg</u>	<u>100 kg</u>	<u>98.33 %</u>	<u>98% -100 %</u>

Time Cycle

S.N.	BATCH ACTIVITY	START TIME (Hrs)	END TIME (Hrs)	TOTAL TIME (Hrs)	REMARKS
1	RM charging	<u>13:15</u>	<u>15:15</u>	<u>02:00</u>	
2	7028 addition	<u>15:15</u>	<u>19:45</u>	<u>04:30</u>	
3	Batch Maintaining	<u>19:45</u>	<u>21:45</u>	<u>02:00</u>	
4	Batch Finalization	<u>21:45</u>	<u>09:30</u>	<u>11:45</u>	
5	7110 addition	<u>09:30</u>	<u>10:30</u>	<u>01:00</u>	<u>Ca</u>
6	Sample Checking	<u>10:30</u>	<u>12:00</u>	<u>01:30</u>	
7	Final Adjustment	<u>12:00</u>	<u>15:00</u>	<u>03:00</u>	
8	Batch Unloading	<u>15:30</u>	—	—	
—	Total Time			<u>25:45</u>	

Packing Material

S.N.	Packing	Packing Details	Total Packing (Kgs)	I.M.I. / AR No.	Received By	Checked By	Remarks
1	Barrels						
2	Carboys						
3	I.B.C.						
4	Others						
—	Total	No. of Unit :		—	—	—	

Remarks (If any)

Batch Hold in R-17 for mixing

Reviewed By 	Approved By
Manager - Production	Manager - Q.A.

PREPARED BY 	REVIEWED BY 	APPROVED BY
INCHARGE - PRODUCTION	MANAGER - PRODUCTION	MANAGER - Q.A.

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RISHABH METALS AND CHEMICALS PVT. LTD.

BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV : 01

B.M.R. Form No.: RR-08-94, REV : 01		B.M.R. Page No.: 02 of 08		BMR Effective Date: 31/03/2023		
Refer SOP: SOP / 5065 REV : 01		BATCH PROCESS SHEET		Supersedes: REV : 00		
Equipment Tag No.: R-17						BATCH NUMBER 000-10012601674
Stirrer Belt Condition Check by ——OK		Batch Start Date: 22/01/26				
Reactor Cleaned by Balaji P.		Reactor Cleaning Checked		Anil		
Batch Started by (Prod. Executive) Mahesh		Batch Started by (Operator)		Anil		
Batch Completed by (Prod. Executive) Tushar		Batch Completed by (Operator)		Rajiv		
S.N.	RM NAME	QTY (KGS)	I.M.I./A.R. NUMBER	RECEIVED BY	CHECKED BY	REMARKS
1	9063	950.49	10012601674 10012601674	Anil	Mahesh	
2	7048 - First lot	91.48	—	Anil	Mahesh	
3	7028	223.22	1151	Anil	Mahesh	
4	7048 - Second lot	1265.94	—	Anil	Mahesh	
5	7048 - Third lot	1265.94	—	Anil	Rajiv	
6	7048 - Fourth lot	1265.94	—	Rajiv	Rajiv	
7	7093/ 7053	103.96	1108	Rajiv	Rajiv	
8	7048 - Solid Ad.	585.93	—	Rajiv	Tushar	
9	7110	297.03	1052	Rajiv	Tushar	
10	7599	6.149	0538	Rajiv	Tushar	
—	Total Qty (Kgs)		—	—	—	—

Inhouse Test Results @ 25°C

Phy. App.:	Light yellow color visc. liq.		
Sp. Gravity:	1.060	pH:	3.80
Viscosity:	80	Solid Content: 17.34	
Final Results : Output:	Kgs	Yield = 5900 kg	
Packing Details:	—		
Remarks:	Batch Hold in R-17 for mixing		

Prepared By	Reviewed By
Mahesh 22/01/26	
Executive - Production	
Incharge - Production	

PREPARED BY	REVIEWED BY	APPROVED BY
 28/03/2023	 28/03/2023	 9/04/2023
INCHARGE - PRODUCTION		MANAGER - PRODUCTION
MANAGER - PRODUCTION		MANAGER - Q.A.

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RISHABH METALS AND CHEMICALS PVT. LTD.

BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV : 01

B.M.R. Form No.: RR-08-94, REV : 01	B.M.R. Page No.: 03 of 08	BMR Effective Date: 31/03/2023
Refer SOP: SOP / 5065 REV : 01		Supersedes: REV : 00
Process Start Date : 22/01/2026	BATCH PROCESS RECORD	BATCH NUMBER
Process Start Shift: 1st	Equipment Tag No.: R-14	000 10012601674

S.N.	Batch Process Details	QTY (Kgs)	Start Time	End Time	Temperature	Remarks
1	9063 Charging	950.49 kg	13:15		24.0	charge - 9063
2	Start stirring	—	14:00		24.0	stirring started
3	7048 - first lot addition	91.48 kg	14:15		24.1	charge, D.M.W
4	Chilling start	—	14:30		24.0	chilling started
			14:45		23.4	
			15:00		22.9	
			15:15		20.2	
			16:00			
5	7028 addition Tank-404	404 kg	15:15		20.2	C.No.28. addn started
	D.L = 130 kg	391	15:30		20.0	
		370	15:45		19.8	
		351	16:00		19.6	
		331	16:15		20.1	

Prepared By	Reviewed By
Executive - Production	Incharge - Production

PREPARED BY	REVIEWED BY	APPROVED BY
INCHARGE - PRODUCTION	MANAGER - PRODUCTION	MANAGER - Q.A.

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BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV : 01

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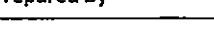
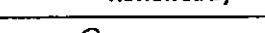
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BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV :01

Prepared By	Reviewed By
 A 23/11/26	 CP 23/11/26
Executive - Production	Incharge - Production

PREPARED BY	REVIEWED BY	APPROVED BY
 28/03/2023	 28/03/2023	 30/03/2023
INCHARGE - PRODUCTION	MANAGER - PRODUCTION	MANAGER - Q.A.

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Metals & Chemicals Pvt. Ltd.

RISHABH METALS AND CHEMICALS PVT. LTD.

BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV : 01

B.M.R. Form No.: RR-08-94, REV : 01

B.M.R. Page No.: 06 of 08

BMR Effective Date: 31/03/2023

Refer SOP: SOP / 5065 REV : 01

Supersedes: REV : 00

Process Start Date : 23/01/26

BATCH NUMBER

Process Start Shift: 11nd

000 1112601674

BATCH PROCESS RECORD

S.N.	Batch Process Details	QTY (Kgs)	Start Time	End Time	Temperature	Remarks
7	7048 - second lot addition	1265.9	21-h5		20.6	7048 Second lot start.
			22-00		29.1	
			22-15		22.9	H.P. Start.
			22-30		28-1	
			22-h5		35-5	
			23-00		40-2	
			23-15		42-1	
			23-30		45-0	
			23-h5		49-9	H.P. Start.
			24-00		50-1	
			24-15		49-7	9. CPS
8	7048 - third lot addition	21630		50-6		
			21-h5		50-2	H.P. Start.
			01-00		51-0	
			01-15		52-6	10. CPS
			01-30		58-2	
			01-h5		60-5	H.P. Start.
			02-00		60-4	
			02-15		60-6	
			02-30		60-8	
			02-h5		61-2	H.P. Start -
			03-00		61-9	

Prepared By

23/01/26

Reviewed By

23/01/26

Executive - Production

Incharge - Production

PREPARED BY

23/03/2023

REVIEWED BY

23/03/2023

APPROVED BY

23/03/2023

INCHARGE - PRODUCTION

MANAGER - PRODUCTION

MANAGER - Q.A.

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BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV : 01

B.M.R. Form No.: RR-08-94, REV : 01	B.M.R. Page No.: 07 of 08	BMR Effective Date: 31/03/2023
Refer SOP: SOP/ 5065 REV : 01		Supersedes: REV : 00
Process Start Date : 22/01/25	BATCH PROCESS RECORD	BATCH NUMBER
Process Start Shift: 00:00 11/26	Equipment Tag No.: A. 17	000.10012601674

S.N.	Batch Process Details	QTY (Kgs)	Start Time	End Time	Temperature	Remarks
9	7048 - fourth lot addition		03.15		64.5	
			03.30		66.8	12 cps
			03.45		68.2	H.P. STOP
			04.00		71.0	25 cps
			04.15		71.0	
			05.30		70.6	75 cps
	1265294	09.45			70.4	45 cps 3rd lot add in
		05.00			70.2	started slowly
		05.15			70.0	
		05.30			69.4	42 cps
		05.45			70.1	
		06.00			72.3	
		06.15			74.6	
		06.30			73.2	40 cps
		06.45			72.1	add 2-3% K2CO3 added
		07.00			74.0	48 cps
		07.15			74.0	
		07.30			74.0	132 cps
		07.45			73.8	
		08.00			73.4	200 cps
		08.15			72.8	310 cps
		08.30			72.5	400 cps

Prepared By	Reviewed By
Executive - Production	Incharge - Production

PREPARED BY	REVIEWED BY	APPROVED BY
INCHARGE - PRODUCTION	MANAGER - PRODUCTION	MANAGER - QA

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BATCH MANUFACTURING RECORD (BMR)

NAME OF PRODUCT: 5065 REV : 01

B.M.R. Form No.: RR-08-94, REV : 01	B.M.R. Page No.: 08 of 08	BMR Effective Date: 31/03/2023
Refer SOP: SOP / 5065 REV : 01		Supersedes: REV : 00
Process Start Date : 23/01/2026 Process Start Shift : 1st	BATCH PROCESS RECORD	BATCH NUMBER 000-1112601674
Equipment Tag No.: R-17		

S.N.	Batch Process Details	QTY (Kgs)	Start Time	End Time	Temperature	Remarks
10	7053/7093 addition		08:42		72.1	550 cps
			09:00		72.2	600 cps
	D.M.W. 4th lot	1265.94 kg	09:15		72.0	780 cps - Batchr final.
				10		add. D.M.W. add H.C.L.
11	7110-addition					Cooling started
		7110 - 997.03 kg	09:34	10:30	67.0	add. 7110, 297.03
			10:30	11:00		Sample check
12	Sample Checking	P.App.	Light yellow Color visc. liq.			
		pH @ 25°C	3.80			
		Sp. Gravity	1.060			
		Viscosity	80 cps			
13	Final Adjustment		12:00	15:00		Final Adjustment
14	Addition of 7599		15:00	15:30		7599 add.
15	Batch Unloading		15:30			Batch Hold in R-17 for mixing = 5900 kg X 01 nos Yield = 5900 kg

Prepared By	Reviewed By
Executive - Production	Incharge - Production

PREPARED BY	REVIEWED BY	APPROVED BY
INCHARGE - PRODUCTION	MANAGER - PRODUCTION	MANAGER - Q.A.

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Rishabh

RISHABH METALS & CHEMICALS PVT. LTD.

Packing Details

Name of Product :

Batch No.: 0000 1012601674

Total Qty:

Tare Wet.:

Balance ID.No. : ;

Calibration status:

All Carboy's/Barrels/IBC Rinsed (Yes / No):

Signature and Date:

Net wet = Gross wet - Tare Wet

Page No.-1 of 2

Ref. BMR No.: RR-08-14

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000 1012601674

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Packing Details

Page No.-2 of 2

Ref. BMR No.: RR-08-14

*Note: One common checked by sign from drum No. 01 to 10 and after same till end

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Metals & Chemicals Pvt. Ltd.

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RISHABH METALS AND CHEMICALS PVT. LTD.

TITLE: BMR REVIEW CHECKLIST

DOCUMENT NO.	QAD/RJ-DP-02/F/001	REVISION NO.	01
EFFECTIVE DATE	01/10/2025	REVIEW DATE	30/09/2028

SECTION: - A

Sr. No.	Review Points	Status		
		Yes	No	Na
1	Each & every stage appropriate signature of operator & executive was documented	✓		
2	Batch manufacturing process strictly followed with related attached SOP.	✓		
3	Dedicated BMR's & SOPs are used in the process.	✓		
4	Stage wise process/addition clearly recorded in the BMR.	✓		
5	Issuance slip (store) attached with BMR.	✓		
6	Issuance Quantity (Inputs) for manufactured is tally with Required Quantity & standard quantity.	✓		
7	Allotment of AR No. for RM/PM	✓		
8	Current Version followed for analysis or testing of RM/PM	✓		
9	Quality of raw material & packaging material with IMI No.	✓		
10	Verification of Equipment cleaning record.		✓	
11	Stage wise Time & temperature is matching within the limits.	✓		
12	In process sampling & testing results are recorded in the BMR.	✓		
13	Signed deviation report by qc attached in case of product is failed in inhouse or marketing specifications.	✓		
14	Finish product output quantity is within standard range.	✓		
15	Allotment of AR No. for FP	✓		
16	Current revision inspection plan used for analysis or testing of FP	✓		
17	Finish product test results are within specification & approved by qc	✓		
18	Batch Status (Pass or Fail)	✓		
19	Time & temperature data logger sheet with graph attached.		✓	
20	All the specification results (for RM/PM inspection plan photo a copy is available within specified range.	✓		
21	RM inputs & finished product output (yield) are within the standards	✓		
22	All the Blank spaces are to be cross lined with NA mark wherever applicable.	✓		

PREPARED & ISSUED BY

DESIGNATION:

QA EXECUTIVE

SIGNATURE:

DATE:

Umesh
26/09/2025

REVIEWED BY

DESIGNATION:

ASST.QA MANAGER

SIGNATURE:

Deep
28/09/2025

APPROVED BY

DESIGNATION:

QA MANAGER / MR

SIGNATURE:

Chirag
30/09/2025

CONTROLED COPY

TITLE: BMR REVIEW CHECKLIST

DOCUMENT NO.	QAD/RJ-DP-02/F/001	REVISION NO.	01
EFFECTIVE DATE	01/10/2025	REVIEW DATE	30/09/2028

B.W.S. 10012601624

23	Verify QA authorized copy a) Current version of BMR b) Allotment of Batch no. c) Signature of QA dept person d) If expired RM used check for approved copy attached.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
----	--	-------------------------------------	-------------------------------------	-------------------------------------	-------------------------------------

SECTION: - B

Sr. No.	Attachments	Status		
		Yes	No	NA
1	Issuance slip (Voucher)	<input checked="" type="checkbox"/>		
2	Deviation Report	<input checked="" type="checkbox"/>		
3	Data Logger		<input checked="" type="checkbox"/>	
4	QC Test Report	<input checked="" type="checkbox"/>		

*✓
30/09/2025*
Reviewed By:

*✓
30/09/2025*
Checked By:

*✓
30/09/2025*

PREPARED & ISSUED BY DESIGNATION: QA EXECUTIVE SIGNATURE: DATE:	REVIEWED BY DESIGNATION: ASST.QA MANAGER SIGNATURE: DATE:	APPROVED BY DESIGNATION: QA MANAGER / MR SIGNATURE: DATE:
<i>✓ 30/09/2025</i>	<i>✓ 30/09/2025</i>	<i>✓ 30/09/2025</i>