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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-05 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 20:20:0:13 | PAGE 1 of 6 |

TECHNICAL PROCUREMENT SPECIFICATION (TPS)

FOR

OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS

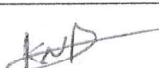
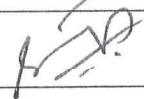
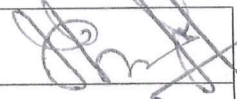
FOR

PACKING BHARAT NPK 20:20:0:13

FACT UDYOGAMANDAL COMPLEX

KOCHI, INDIA

TPS No. UCTS/TPS/2024-05 R0

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| 0 | 29/08/24 | ENQUIRY | NAGENDRA | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

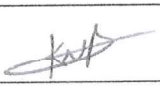
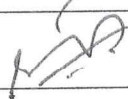

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-05
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 20:20:0:13****PAGE 2 of 6**


| No | Description | Details |
|-----|--|---|
| 1.0 | INSIDE DIMENSIONS | 915 MM X 610 MM |
| 1.1 | TOLERANCE | + 30 MM, -0.00 (-NIL ON BOTH WIDTH AND LENGTH.) |
| 2.0 | CAPACITY | 50 KGS. |
| 3.0 | BAG WEIGHT | |
| 3.1 | WEIGHT OF INDIVIDUAL BAG | 135 GMS. TOLERANCE \pm 3% |
| 3.2 | WEIGHT OF A BALE (350 BAGS) | 47.25 KGS. (NET WT.) TOLERANCE +3%/- 0.00% (No negative tolerance) |
| 4.0 | BREAKING STRENGTH | TESTING OF BREAKING STRENGTH SHALL BE DONE USING RAVELLED STRIP METHOD (CONSTANT RATE OF TRAVERSE) AND THE RATE OF TRAVERSE SHALL BE 300 MM/MINUTE. |
| 4.1 | i) WIDTHWISE ii) WIDTHWISE (Lamination Joint) | 91.8 KGF 91.8 KGF |
| 4.2 | LENGTHWISE | 91.8 KGF |
| 4.3 | BOTTOM SEAM | 40.8 KGF |
| 5.0 | DROP TEST | THE DROP TEST SHALL BE CARRIED OUT FOR EACH LOT SUPPLIED BY THE BAG SUPPLIER. FOR THIS TEST 4 nos. BAGS SHALL BE RANDOMLY SELECTED FROM EACH LOT. ALL BAGS SHALL BE SUBJECTED TO DROP TEST FROM A HEIGHT OF 3 MTRS FROM BOTH SIDES (4 DROP PER BAG). BAGS DURING DROP TEST WILL DROPPED ON THE STOMACH. NO BAGS SHOULD RUPTURE WHEN SUBJECTED TO MINIMUM 04 NOS. DROPS. |
| 6.0 | FABRIC | BAGS MADE OUT OF SINGLE PIECE OF LAMINATED PP FABRIC WOVEN ON CIRCULAR LOOM AS PER IS 9755:2021. ANY MIDDLE SEWN OR JOINTED BAGS WILL NOT BE ACCEPTABLE. THE FABRIC USED SHALL BE FREE FROM ALL MAJOR WEAVING DEFECTS LIKE GAPS, PICK POINTS, MISSING TAPES ETC. PP GRANULE FOR FABRIC & UV MASTER BATCH- Grade H030SG OR |

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| 0 | 29/08/24 | ENQUIRY | NAGENDRA | SYAMJITH | JAISON XAVIER |
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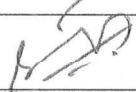

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R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 20:20:0:13****PAGE 3 of 6**

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|-------|-------------------------------|---|
| | | EQUIVALENT. MIN 3% of 20% UV MASTER BATCH TO BE USED AND THE PP WOVEN FABRIC OF BAG SHALL BE MADE OUT OF UV STABILISED MATERIAL AND SHALL HAVE AT LEAST 50% OF ORIGINAL BREAKING STRENGTH WHEN TESTED AFTER THE SAME HAS BEEN EXPOSED TO UV RADIATION AND WEATHERING AS PER METHOD GIVEN IN ANNEXURE-F OF IS 9755:2021. FABRIC COLOUR- LIGHT BLUE (HEX CODE: ADD8E6). |
| 6.1 | TAPE | MONOAXIALLY ORIENTED PP TAPES HAVING 1000 DENIER AND MINIMUM WIDTH OF 2.5MM. THE FABRIC SHALL BE WOVEN FROM PP TAPES CONFORMING TO IS:11197. THE ELONGATION OF TAPES WHILE TESTING BREAKING STRENGTH SHALL BE IN THE RANGE OF 15 to 25%. TOLERANCE FOR DENIER: $\pm 10\%$ DENIER. |
| 6.2 | MESH | 10 x 10 PER SQ. INCH. |
| 6.3 | ENDS PER DM | 40. TOLERANCE ± 2 |
| 6.4 | PICKS PER DM | 40. TOLERANCE ± 2 |
| 6.5 | ELONGATION AT BREAK OF FABRIC | (5.0 CM X 20 CM STRIP METHOD) |
| 6.5.1 | LENGTHWISE | 20% |
| 6.5.2 | WIDTHWISE | 20% |
| 6.5.3 | TOLERANCE | RANGE: 15 to 25 % ON BOTH WIDTHWISE & LENGTHWISE. |
| 7.0 | LAMINATION | FABRIC SHALL BE LAMINATED OUTSIDE WITH PP GRANULES (GRADE H350EG/H350FG OR EQUIVALENT) 23 GMS/M2(CORRESPONDING TO 100 GAUGE NOMINAL) WITH AN OVERLAP/OVERHANG OF 5 - 15MM. VIRGIN PP GRANULES SHALL BE USED AND THE LAMINATION SHALL BE FREE FROM PIN HOLES, PATCHES, BLISTERS, TEARS ETC. THE LAMINATION SHOULD COVER THE ENTIRE OUTSIDE AREA OF THE FABRIC USED. COLOR OF LAMINATION OF BAGS SHALL BE TRANSPARENT |
| 8.0 | BAG MOUTH | NEATLY SCISSOR CUT. EDGES SHOULD NOT BE ROUGH |

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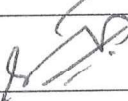

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| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 20:20:0:13 | PAGE 4 of 6 |


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| 9.0 | BRANDING/PRINTING | MULTI COLOUR, SINGLE SIDE AS PER MONOGRAM SPECIFIED BY FACT. THE FOLLOWING INK (FERTILISER GRADE) SHALL BE USED: HINDUSTAN INK BY HINDUSTAN INKS AND RESINS LTD., DAMAN.OR VARSHA INK OF VARSHA PRINTING INK MFG. CO., NAGPUR. SHADE OF THE BRANDING SHALL BE UNIFORM AND MATCHING FACT'S REQUIREMENTS. |
| | <p>THE INK USED SHOULD HAVE SCRATCH RESISTANT AIDS, GLOSSY, HIGH TECH/ POLYAMIDE QUALITY, ALKALI RESISTANT, SMUDGE FREE, BRIGHT IN COLOR, SHOULD NOT SMEAR IN CONTACT WITH WATER AND SHOULD NOT AFFECT THE FABRIC. ART WORK WILL BE PROVIDED BY FACT. PRINTING QUALITY SHALL BE CORONA TREATED SCUFF RESISTANT/VERY SHARP PRINT,NAIL PROOF/TAPE PROOF & EVEN COLORS THROUGHOUT THE LOT(PREFERABLY POLYAMIDE) ON ROLL TO ROLL PRINTING MACHINE. 3 SAMPLES OF THE BAGS OF THE REQUIRED COLOUR AS PER FACT REQUIREMENT SHALL BE SUBMITTED BEFORE STARTING BULK MANUFACTURING OF BAGS.ALL THE SAMPLES WILL BE SIGNED AND APPROVED SAMPLE WILL BE RETURNED WITH SIGNATURE OF THE AUTHORIZED REPRESENTATIVE OF FACT. ANY LOT SUPPLIED, IF FOUND DEVIATING IN COLOUR AS COMPARED TO APPROVED COLOUR WILL NOT BE ACCEPTED.</p> <p>EACH BAG SHALL BE COMPULSORILY MARKED WITH BIS STANDARD MARK, SWATCH BHARAT LOGO AND RECYCLING LOGO (PP) AS SHOWN IN IS 9755:2021, CLEARLY VISIBLE AT THE BOTTOM OF THE BAG.</p> <p>THE ENTIRE LOT OF PP BAGS SHALL BE LIABLE FOR REJECTION IN CASE THE TEST SAMPLES FAIL TO PASS THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98(RE APPROVED 2004)</p> | |
| 10.0 | STITCHING | DOUBLE FOLD, DOUBLE STITCH WITH UV STABILISED THREAD/ MULTIFILAMENT YARN OF 1200 DENIER. STITCHING SHALL BE DONE AS PRESCRIBED IN IS 9755:2021. FOLD SHOULD OCCUR ON THE OPPOSITE SIDE OF THE PRINTING MADE ON THE BAG. |
| 11.0 | PACKING | 350 BAGS IN A BALE. BALES SHALL BE WRAPPED WITH HDPE/PP FABRIC OR HESSIAN CLOTH AND STITCHED PROPERLY TO WITHSTAND HAZARDS OF TRANSPORTATION. EACH BALE SHALL BE MARKED WITH NAME OF SUPPLIER, TYPE AND SIZE OF BAG, |

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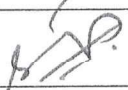

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-05
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 20:20:0:13****PAGE 5 of 6**


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| | | SERIAL NO. OF BALE, NO. OF BAGS IN THE BALE AND THE BALE WEIGHT |
| 12.0 | ASH CONTENT | ALL THE LOTS SUPPLIED SHALL BE TESTED FOR ASH CONTENT WHICH INCLUDES MAINLY CALCIUM CARBONATE CONTENT. ASH CONTENT IN BAGS SHALL BE 2.2% MAX (INCLUDING ALL IMPURITIES). IN CASE ASH CONTENT IS ABOVE 2.2% THE LOT WILL BE REJECTED. SAMPLES SHALL BE TAKEN OUT FROM THE LOT AS SPECIFIED IN IS 9755:2021 FOR TESTING ASH CONTENT. |
| 13.0 | CRITERIA FOR CONFORMITY | THE LOT SHALL BE CONSIDERED AS CONFORMING TO THE REQUIREMENTS FOR ACCEPTANCE IF ALL THE FOLLOWING CONDITIONS ARE SATISFIED. |
| | <p>i. THE NUMBER OF DEFECTIVE BAGS IN CASE OF VISUAL INSPECTIONS, ENDS, PICKS AND DIMENSIONS IS UP TO 10% OF THE SAMPLE SIZE AFTER ROUNDING OFF THE FRACTION TO NEXT HIGHER INTEGER.</p> <p>ii. NONE OF THE BAG OR BALE OF 350 BAGS WEIGHS LESS THAN THE RESPECTIVE LOWER SPECIFIED LIMIT. HIGHER WEIGHT CAN BE ACCEPTED</p> <p>iii. THE AVERAGE BREAKING STRENGTH OF FABRIC IN BOTH LENGTHWISE, WIDTHWISE AND WIDTHWISE (LAMINATION JOINT) IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL VALUES IS MORE THAN 10% BELOW THE SPECIFIED VALUE. THE SAMPLES SELECTED FOR BREAKING STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> <p>iv. THE AVERAGE BREAKING STRENGTH OF THE FABRIC AT BOTTOM SEAM IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL BAG VALUE IS MORE THAN 10 PERCENT BELOW THE SPECIFIED VALUE. THE SAMPLE SELECTED FOR SEAM STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> | |

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| | <p>v. NONE OF THE SAMPLE BAGS SHALL HAVE PERCENTAGE ELONGATION AND ASH CONTENT OUTSIDE THE SPECIFIED RANGE</p> <p>vi. NONE OF THE PP BAG SAMPLES AFTER EXPOSING TO UV RADIATION AND WEATHERING SHALL HAVE BREAKING STRENGTH LESS THAN 50 PERCENT OF THE ORIGINAL BREAKING STRENGTH.</p> <p>vii. NONE OF THE PP BAG SAMPLES SHALL FAIL IN THE DROP TEST</p> <p>viii. NONE OF THE PP BAG TEST SAMPLES SHALL FAIL IN THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98 (RE APPROVED 2004)</p> | |
| 14.0 | APPLICABLE STANDARD | APPLICABLE STANDARD SHALL BE IS 9755:2021 FOR PP WOVEN BAGS FOR PACKING FERTILISERS. HOWEVER, IN CASES WHERE REQUIREMENTS IN THIS SPECIFICATION DIFFER FROM THOSE IN IS 9755:2021, REQUIREMENTS IN THIS SPECIFICATION SHALL PREVAIL OVER THOSE IN IS 9755:2021. |

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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-06 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 20.5:0:0:23 | PAGE 1 of 6 |

TECHNICAL PROCUREMENT SPECIFICATION (TPS)

FOR

OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS


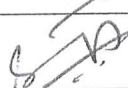
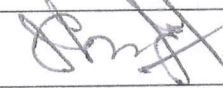
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PACKING BHARAT NPK 20.5:0:0:23

FACT UDYOGAMANDAL COMPLEX


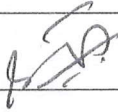

KOCHI, INDIA

TPS No. UCTS/TPS/2024-06 R0

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R0**TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 20.5:0:23****PAGE 2 of 6**


| No | Description | Details |
|-----|--|---|
| 1.0 | INSIDE DIMENSIONS | 889 MM X 533 MM |
| 1.1 | TOLERANCE | + 30 MM, -0.00 (-NIL ON BOTH WIDTH AND LENGTH.) |
| 2.0 | CAPACITY | 50 KGS. |
| 3.0 | BAG WEIGHT | |
| 3.1 | WEIGHT OF INDIVIDUAL BAG | 115 GMS. TOLERANCE \pm 3% |
| 3.2 | WEIGHT OF A BALE (400 BAGS) | 46.0 KGS. (NET WT.) TOLERANCE +3%/- 0.00% (No negative tolerance) |
| 4.0 | BREAKING STRENGTH | TESTING OF BREAKING STRENGTH SHALL BE DONE USING RAVELLED STRIP METHOD (CONSTANT RATE OF TRAVERSE) AND THE RATE OF TRAVERSE SHALL BE 300 MM/MINUTE. |
| 4.1 | i) WIDTHWISE ii) WIDTHWISE (Lamination Joint) | 91.8 KGF 91.8 KGF |
| 4.2 | LENGTHWISE | 91.8 KGF |
| 4.3 | BOTTOM SEAM | 40.8 KGF |
| 5.0 | DROP TEST | THE DROP TEST SHALL BE CARRIED OUT FOR EACH LOT SUPPLIED BY THE BAG SUPPLIER. FOR THIS TEST 4 nos. BAGS SHALL BE RANDOMLY SELECTED FROM EACH LOT. ALL BAGS SHALL BE SUBJECTED TO DROP TEST FROM A HEIGHT OF 3 MTRS FROM BOTH SIDES (4 DROP PER BAG). BAGS DURING DROP TEST WILL DROPPED ON THE STOMACH. NO BAGS SHOULD RUPTURE WHEN SUBJECTED TO MINIMUM 04 NOS. DROPS. |
| 6.0 | FABRIC | BAGS MADE OUT OF SINGLE PIECE OF LAMINATED PP FABRIC WOVEN ON CIRCULAR LOOM AS PER IS 9755:2021. ANY MIDDLE SEWN OR JOINTED BAGS WILL NOT BE ACCEPTABLE. THE FABRIC USED SHALL BE FREE FROM ALL MAJOR WEAVING DEFECTS LIKE GAPS, PICK POINTS, MISSING TAPES ETC. PP GRANULE FOR FABRIC & UV MASTER BATCH- Grade H030SG OR |

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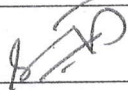
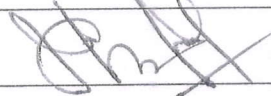
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SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 20.5:0:0:23****PAGE 3 of 6**

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| | | EQUIVALENT. MIN 3% of 20% UV MASTER BATCH TO BE USED AND THE PP WOVEN FABRIC OF BAG SHALL BE MADE OUT OF UV STABILISED MATERIAL AND SHALL HAVE AT LEAST 50% OF ORIGINAL BREAKING STRENGTH WHEN TESTED AFTER THE SAME HAS BEEN EXPOSED TO UV RADIATION AND WEATHERING AS PER METHOD GIVEN IN ANNEXURE-F OF IS 9755:2021. FABRIC COLOUR- LIGHT BLUE (HEX CODE : ADD8E6). |
| 6.1 | TAPE | MONOAXIALLY ORIENTED PP TAPES HAVING 1000 DENIER AND MINIMUM WIDTH OF 2.5MM. THE FABRIC SHALL BE WOVEN FROM PP TAPES CONFORMING TO IS:11197. THE ELONGATION OF TAPES WHILE TESTING BREAKING STRENGTH SHALL BE IN THE RANGE OF 15 to 25%. TOLERANCE FOR DENIER: $\pm 10\%$ DENIER. |
| 6.2 | MESH | 10 x 10 PER SQ. INCH. |
| 6.3 | ENDS PER DM | 40. TOLERANCE ± 2 |
| 6.4 | PICKS PER DM | 40. TOLERANCE ± 2 |
| 6.5 | ELONGATION AT BREAK OF FABRIC | (5.0 CM X 20 CM STRIP METHOD) |
| 6.5.1 | LENGTHWISE | 20% |
| 6.5.2 | WIDTHWISE | 20% |
| 6.5.3 | TOLERANCE | RANGE: 15 to 25 % ON BOTH WIDTHWISE & LENGTHWISE. |
| 7.0 | LAMINATION | FABRIC SHALL BE LAMINATED OUTSIDE WITH PP GRANULES (GRADE H350EG/H350FG OR EQUIVALENT) 23 GMS/M2(CORRESPONDING TO 100 GAUGE NOMINAL) WITH AN OVERLAP/OVERHANG OF 5 - 15MM. VIRGIN PP GRANULES SHALL BE USED AND THE LAMINATION SHALL BE FREE FROM PIN HOLES, PATCHES, BLISTERS, TEARS ETC. THE LAMINATION SHOULD COVER THE ENTIRE OUTSIDE AREA OF THE FABRIC USED. COLOR OF LAMINATION OF BAGS SHALL BE TRANSPARENT |
| 8.0 | BAG MOUTH | NEATLY SCISSOR CUT. EDGES SHOULD NOT BE ROUGH |

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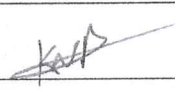
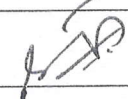
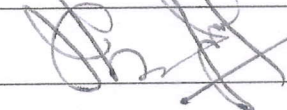
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|------|-------------------|---|
| 9.0 | BRANDING/PRINTING | MULTI COLOUR, SINGLE SIDE AS PER MONOGRAM SPECIFIED BY FACT. THE FOLLOWING INK (FERTILISER GRADE) SHALL BE USED: HINDUSTAN INK BY HINDUSTAN INKS AND RESINS LTD., DAMAN.OR VARSHA INK OF VARSHA PRINTING INK MFG. CO., NAGPUR. SHADE OF THE BRANDING SHALL BE UNIFORM AND MATCHING FACT'S REQUIREMENTS. |
| | | <p>THE INK USED SHOULD HAVE SCRATCH RESISTANT AIDS, GLOSSY, HIGH TECH/ POLYAMIDE QUALITY, ALKALI RESISTANT, SMUDGE FREE, BRIGHT IN COLOR, SHOULD NOT SMEAR IN CONTACT WITH WATER AND SHOULD NOT AFFECT THE FABRIC. ART WORK WILL BE PROVIDED BY FACT. PRINTING QUALITY SHALL BE CORONA TREATED SCUFF RESISTANT/VERY SHARP PRINT,NAIL PROOF/TAPE PROOF & EVEN COLORS THROUGHOUT THE LOT(PREFERABLY POLYAMIDE) ON ROLL TO ROLL PRINTING MACHINE. 3 SAMPLES OF THE BAGS OF THE REQUIRED COLOUR AS PER FACT REQUIREMENT SHALL BE SUBMITTED BEFORE STARTING BULK MANUFACTURING OF BAGS.ALL THE SAMPLES WILL BE SIGNED AND APPROVED SAMPLE WILL BE RETURNED WITH SIGNATURE OF THE AUTHORIZED REPRESENTATIVE OF FACT. ANY LOT SUPPLIED, IF FOUND DEVIATING IN COLOUR AS COMPARED TO APPROVED COLOUR WILL NOT BE ACCEPTED.</p> <p>EACH BAG SHALL BE COMPULSORILY MARKED WITH BIS STANDARD MARK, SWATCH BHARAT LOGO AND RECYCLING LOGO (PP) AS SHOWN IN IS 9755:2021, CLEARLY VISIBLE AT THE BOTTOM OF THE BAG .</p> <p>THE ENTIRE LOT OF PP BAGS SHALL BE LIABLE FOR REJECTION IN CASE THE TEST SAMPLES FAIL TO PASS THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98(RE APPROVED 2004)</p> |
| 10.0 | STITCHING | DOUBLE FOLD, DOUBLE STITCH WITH UV STABILISED THREAD/ MULTIFILAMENT YARN OF 1200 DENIER. STITCHING SHALL BE DONE AS PRESCRIBED IN IS 9755:2021. FOLD SHOULD OCCUR ON THE OPPOSITE SIDE OF THE PRINTING MADE ON THE BAG. |
| 11.0 | PACKING | 400 BAGS IN A BALE. BALES SHALL BE WRAPPED WITH HDPE/PP FABRIC OR HESSIAN CLOTH AND STITCHED PROPERLY TO WITHSTAND HAZARDS OF TRANSPORTATION. EACH BALE SHALL BE MARKED WITH NAME OF SUPPLIER, TYPE AND SIZE OF BAG, |

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| 0 | 29/08/24 | ENQUIRY | NAGENDRA | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-06
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 20.5:0:23****PAGE 5 of 6**

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| | | SERIAL NO. OF BALE, NO. OF BAGS IN THE BALE AND THE BALE WEIGHT |
| 12.0 | ASH CONTENT | ALL THE LOTS SUPPLIED SHALL BE TESTED FOR ASH CONTENT WHICH INCLUDES MAINLY CALCIUM CARBONATE CONTENT. ASH CONTENT IN BAGS SHALL BE 2.2% MAX (INCLUDING ALL IMPURITIES). IN CASE ASH CONTENT IS ABOVE 2.2% THE LOT WILL BE REJECTED. SAMPLES SHALL BE TAKEN OUT FROM THE LOT AS SPECIFIED IN IS 9755:2021 FOR TESTING ASH CONTENT. |
| 13.0 | CRITERIA FOR CONFORMITY | THE LOT SHALL BE CONSIDERED AS CONFORMING TO THE REQUIREMENTS FOR ACCEPTANCE IF ALL THE FOLLOWING CONDITIONS ARE SATISFIED. |
| | <p>i. THE NUMBER OF DEFECTIVE BAGS IN CASE OF VISUAL INSPECTIONS, ENDS, PICKS AND DIMENSIONS IS UP TO 10% OF THE SAMPLE SIZE AFTER ROUNDING OFF THE FRACTION TO NEXT HIGHER INTEGER.</p> <p>ii. NONE OF THE BAG OR BALE OF 400 BAGS WEIGHS LESS THAN THE RESPECTIVE LOWER SPECIFIED LIMIT. HIGHER WEIGHT CAN BE ACCEPTED</p> <p>iii. THE AVERAGE BREAKING STRENGTH OF FABRIC IN BOTH LENGTHWISE, WIDTHWISE AND WIDTHWISE (LAMINATION JOINT) IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL VALUES IS MORE THAN 10% BELOW THE SPECIFIED VALUE. THE SAMPLES SELECTED FOR BREAKING STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> <p>iv. THE AVERAGE BREAKING STRENGTH OF THE FABRIC AT BOTTOM SEAM IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL BAG VALUE IS MORE THAN 10 PERCENT BELOW THE SPECIFIED VALUE. THE SAMPLE SELECTED FOR SEAM STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> | |

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| 0 | 29/08/24 | ENQUIRY | NAGENDRA | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

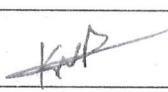
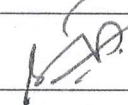
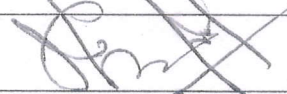
**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-06
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 20.5:0:23****PAGE 6 of 6**

- v. NONE OF THE SAMPLE BAGS SHALL HAVE PERCENTAGE ELONGATION AND ASH CONTENT OUTSIDE THE SPECIFIED RANGE
- vi. NONE OF THE PP BAG SAMPLES AFTER EXPOSING TO UV RADIATION AND WEATHERING SHALL HAVE BREAKING STRENGTH LESS THAN 50 PERCENT OF THE ORIGINAL BREAKING STRENGTH.
- vii. NONE OF THE PP BAG SAMPLES SHALL FAIL IN THE DROP TEST
- viii. NONE OF THE PP BAG TEST SAMPLES SHALL FAIL IN THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98 (RE APPROVED 2004)

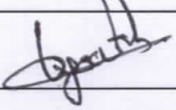
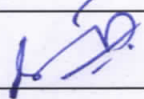

14.0

APPLICABLE
STANDARD

APPLICABLE STANDARD SHALL BE IS 9755:2021 FOR PP WOVEN BAGS FOR PACKING FERTILISERS. HOWEVER, IN CASES WHERE REQUIREMENTS IN THIS SPECIFICATION DIFFER FROM THOSE IN IS 9755:2021, REQUIREMENTS IN THIS SPECIFICATION SHALL PREVAIL OVER THOSE IN IS 9755:2021.

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| 0 | 29/08/24 | ENQUIRY | NAGENDRA | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-03
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT MOP****PAGE 1 of 6****TECHNICAL PROCUREMENT SPECIFICATION (TPS)****FOR****OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS****FOR****PACKING BHARAT MOP****FACT UDYOGAMANDAL COMPLEX****KOCHI, INDIA****TPS No. UCTS/TPS/2024-03 R0**

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| 0 | 12/08/24 | ENQUIRY | VYSAKH | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-03
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT MOP****PAGE 2 of 6**

| No | Description | Details |
|-----|--|---|
| 1.0 | INSIDE DIMENSIONS | 788 MM X 559 MM |
| 1.1 | TOLERANCE | + 30 MM, -0.00 (-NIL ON BOTH WIDTH AND LENGTH.) |
| 2.0 | CAPACITY | 50 KGS. |
| 3.0 | BAG WEIGHT | |
| 3.1 | WEIGHT OF INDIVIDUAL BAG | 108 GMS. TOLERANCE $\pm 3\%$ |
| 3.2 | WEIGHT OF A BALE (400 BAGS) | 43.2 KGS. (NET WT.) TOLERANCE +3%/- 0.00% (No negative tolerance) |
| 4.0 | BREAKING STRENGTH | TESTING OF BREAKING STRENGTH SHALL BE DONE USING RAVELLED STRIP METHOD (CONSTANT RATE OF TRAVERSE) AND THE RATE OF TRAVERSE SHALL BE 300 MM/MINUTE. |
| 4.1 | i) WIDTHWISE ii) WIDTHWISE (Lamination Joint) | 91.8 KGF 91.8 KGF |
| 4.2 | LENGTHWISE | 91.8 KGF |
| 4.3 | BOTTOM SEAM | 40.8 KGF |
| 5.0 | DROP TEST | THE DROP TEST SHALL BE CARRIED OUT FOR EACH LOT SUPPLIED BY THE BAG SUPPLIER. FOR THIS TEST 4 nos. BAGS SHALL BE RANDOMLY SELECTED FROM EACH LOT. ALL BAGS SHALL BE SUBJECTED TO DROP TEST FROM A HEIGHT OF 3 MTRS FROM BOTH SIDES (4 DROP PER BAG). BAGS DURING DROP TEST WILL DROPPED ON THE STOMACH. NO BAGS SHOULD RUPTURE WHEN SUBJECTED TO MINIMUM 04 NOS. DROPS. |
| 6.0 | FABRIC | BAGS MADE OUT OF SINGLE PIECE OF LAMINATED PP FABRIC WOVEN ON CIRCULAR LOOM AS PER IS 9755:2021. ANY MIDDLE SEWN OR JOINTED BAGS WILL NOT BE ACCEPTABLE. THE FABRIC USED SHALL BE FREE FROM ALL MAJOR WEAVING DEFECTS LIKE GAPS, PICK POINTS, MISSING TAPES ETC. PP GRANULE FOR FABRIC & UV MASTER BATCH- Grade H030SG OR |

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| 0 | 12/08/24 | ENQUIRY | VYSAKH | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-03
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT MOP****PAGE 3 of 6**


| | | |
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| | | EQUIVALENT. MIN 3% of 20% UV MASTER BATCH TO BE USED AND THE PP WOVEN FABRIC OF BAG SHALL BE MADE OUT OF UV STABILISED MATERIAL AND SHALL HAVE AT LEAST 50% OF ORIGINAL BREAKING STRENGTH WHEN TESTED AFTER THE SAME HAS BEEN EXPOSED TO UV RADIATION AND WEATHERING AS PER METHOD GIVEN IN ANNEXURE-F OF IS 9755:2021. FABRIC COLOUR- HEX CODE: FCD4D2. |
| 6.1 | TAPE | MONOAXIALLY ORIENTED PP TAPES HAVING 1000 DENIER AND MINIMUM WIDTH OF 2.5MM. THE FABRIC SHALL BE WOVEN FROM PP TAPES CONFORMING TO IS:11197. THE ELONGATION OF TAPES WHILE TESTING BREAKING STRENGTH SHALL BE IN THE RANGE OF 15 to 25%. TOLERANCE FOR DENIER: $\pm 10\%$ DENIER. |
| 6.2 | MESH | 10 x 10 PER SQ. INCH. |
| 6.3 | ENDS PER DM | 40. TOLERANCE ± 2 |
| 6.4 | PICKS PER DM | 40. TOLERANCE ± 2 |
| 6.5 | ELONGATION AT BREAK OF FABRIC | (5.0 CM X 20 CM STRIP METHOD) |
| 6.5.1 | LENGTHWISE | 20% |
| 6.5.2 | WIDTHWISE | 20% |
| 6.5.3 | TOLERANCE | RANGE: 15 to 25 % ON BOTH WIDTHWISE & LENGTHWISE. |
| 7.0 | LAMINATION | FABRIC SHALL BE LAMINATED OUTSIDE WITH PP GRANULES (GRADE H350EG/H350FG OR EQUIVALENT) 23 GMS/M2 (CORRESPONDING TO 100 GUAGE NOMINAL) WITH AN OVERLAP/OVERHANG OF 5 - 15MM. VIRGIN PP GRANULES SHALL BE USED AND THE LAMINATION SHALL BE FREE FROM PIN HOLES, PATCHES, BLISTERS, TEARS ETC. THE LAMINATION SHOULD COVER THE ENTIRE OUTSIDE AREA OF THE FABRIC USED. COLOR OF LAMINATION OF BAGS SHALL BE TRANSPARENT |
| 8.0 | BAG MOUTH | NEATLY SCISSOR CUT. EDGES SHOULD NOT BE ROUGH |

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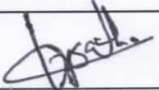
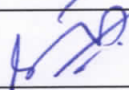
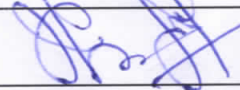
**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-03
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT MOP****PAGE 4 of 6**

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| 9.0 | BRANDING/PRINTING | MULTI COLOUR, SINGLE SIDE AS PER MONOGRAM SPECIFIED BY FACT. THE FOLLOWING INK (FERTILISER GRADE) SHALL BE USED: HINDUSTAN INK BY HINDUSTAN INKS AND RESINS LTD., DAMAN.OR VARSHA INK OF VARSHA PRINTING INK MFG. CO., NAGPUR. SHADE OF THE BRANDING SHALL BE UNIFORM AND MATCHING FACT'S REQUIREMENTS. |
| | <p>THE INK USED SHOULD HAVE SCRATCH RESISTANT AIDS, GLOSSY, HIGH TECH/ POLYAMIDE QUALITY, ALKALI RESISTANT, SMUDGE FREE, BRIGHT IN COLOR, SHOULD NOT SMEAR IN CONTACT WITH WATER AND SHOULD NOT AFFECT THE FABRIC. ART WORK WILL BE PROVIDED BY FACT. PRINTING QUALITY SHALL BE CORONA TREATED SCUFF RESISTANT/VERY SHARP PRINT, NAIL PROOF/TAPE PROOF & EVEN COLORS THROUGHOUT THE LOT(PREFERABLY POLYAMIDE) ON ROLL TO ROLL PRINTING MACHINE. 3 SAMPLES OF THE BAGS OF THE REQUIRED COLOUR AS PER FACT REQUIREMENT SHALL BE SUBMITTED BEFORE STARTING BULK MANUFACTURING OF BAGS. ALL THE SAMPLES WILL BE SIGNED AND APPROVED SAMPLE WILL BE RETURNED WITH SIGNATURE OF THE AUTHORIZED REPRESENTATIVE OF FACT. ANY LOT SUPPLIED, IF FOUND DEVIATING IN COLOUR AS COMPARED TO APPROVED COLOUR WILL NOT BE ACCEPTED.</p> <p>EACH BAG SHALL BE COMPULSORILY MARKED WITH BIS STANDARD MARK, SWATCH BHARAT LOGO AND RECYCLING LOGO (PP) AS SHOWN. IN IS 9755:2021, CLEARLY VISIBLE AT THE BOTTOM OF THE BAG.</p> <p>THE ENTIRE LOT OF PP BAGS SHALL BE LIABLE FOR REJECTION IN CASE THE TEST SAMPLES FAIL TO PASS THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98(RE APPROVED 2004)</p> | |
| 10.0 | STITCHING | DOUBLE FOLD, DOUBLE STITCH WITH UV STABILISED THREAD/ MULTIFILAMENT YARN OF 1200 DENIER. STITCHING SHALL BE DONE AS PRESCRIBED IN IS 9755. FOLD SHOULD OCCUR ON THE OPPOSITE SIDE OF THE PRINTING MADE ON THE BAG. |
| 11.0 | PACKING | 400 BAGS IN A BALE. BALES SHALL BE WRAPPED WITH HDPE/PP FABRIC OR HESSIAN CLOTH AND STITCHED PROPERLY TO WITHSTAND HAZARDS OF TRANSPORTATION. EACH BALE SHALL BE MARKED WITH NAME OF SUPPLIER, TYPE AND SIZE OF BAG, |

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| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

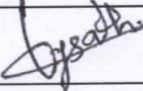
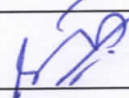

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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-03 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT MOP | PAGE 5 of 6 |


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| | | SERIAL NO. OF BALE, NO. OF BAGS IN THE BALE AND THE BALE WEIGHT |
| 12.0 | ASH CONTENT | ALL THE LOTS SUPPLIED SHALL BE TESTED FOR ASH CONTENT WHICH INCLUDES MAINLY CALCIUM CARBONATE CONTENT. ASH CONTENT IN BAGS SHALL BE 2.2% MAX (INCLUDING ALL IMPURITIES). IN CASE ASH CONTENT IS ABOVE 2.2% THE LOT WILL BE REJECTED. SAMPLES SHALL BE TAKEN OUT FROM THE LOT AS SPECIFIED IN IS 9755:2021 FOR TESTING ASH CONTENT. |
| 13.0 | CRITERIA FOR CONFORMITY | THE LOT SHALL BE CONSIDERED AS CONFORMING TO THE REQUIREMENTS FOR ACCEPTANCE IF ALL THE FOLLOWING CONDITIONS ARE SATISFIED. |
| | <p>i. THE NUMBER OF DEFECTIVE BAGS IN CASE OF VISUAL INSPECTIONS, ENDS, PICKS AND DIMENSIONS IS UP TO 10% OF THE SAMPLE SIZE AFTER ROUNDING OFF THE FRACTION TO NEXT HIGHER INTEGER.</p> <p>ii. NONE OF THE BAG OR BALE OF 400 BAGS WEIGHS LESS THAN THE RESPECTIVE LOWER SPECIFIED LIMIT. HIGHER WEIGHT CAN BE ACCEPTED</p> <p>iii. THE AVERAGE BREAKING STRENGTH OF FABRIC IN BOTH LENGTHWISE, WIDTHWISE AND WIDTHWISE (LAMINATION JOINT) IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL VALUES IS MORE THAN 10% BELOW THE SPECIFIED VALUE. THE SAMPLES SELECTED FOR BREAKING STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> <p>iv. THE AVERAGE BREAKING STRENGTH OF THE FABRIC AT BOTTOM SEAM IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL BAG VALUE IS MORE THAN 10 PERCENT BELOW THE SPECIFIED VALUE. THE SAMPLE SELECTED FOR SEAM STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> | |

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| 0 | 12/08/24 | ENQUIRY | VYSAKH | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-03
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT MOP****PAGE 6 of 6**

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| | <p>v. NONE OF THE SAMPLE BAGS SHALL HAVE PERCENTAGE ELONGATION AND ASH CONTENT OUTSIDE THE SPECIFIED RANGE</p> <p>vi. NONE OF THE PP BAG SAMPLES AFTER EXPOSING TO UV RADIATION AND WEATHERING SHALL HAVE BREAKING STRENGTH LESS THAN 50 PERCENT OF THE ORIGINAL BREAKING STRENGTH.</p> <p>vii. NONE OF THE PP BAG SAMPLES SHALL FAIL IN THE DROP TEST</p> <p>viii. NONE OF THE PP BAG TEST SAMPLES SHALL FAIL IN THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98 (RE APPROVED 2004)</p> |
| 14.0 | <p>APPLICABLE STANDARD</p> <p>APPLICABLE STANDARD SHALL BE IS 9755:2021 FOR PP WOVEN BAGS FOR PACKING FERTILISERS. HOWEVER, IN CASES WHERE REQUIREMENTS IN THIS SPECIFICATION DIFFER FROM THOSE IN IS 9755:2021, REQUIREMENTS IN THIS SPECIFICATION SHALL PREVAIL OVER THOSE IN IS 9755:2021.</p> |

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| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-07 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 16:16:16 | PAGE 1 of 6 |

TECHNICAL PROCUREMENT SPECIFICATION (TPS)

FOR

OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS

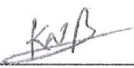
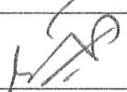

FOR

PACKING BHARAT NPK 16:16:16

FACT UDYOGAMANDAL COMPLEX

KOCHI, INDIA


TPS No. UCTS/TPS/2024-07 R0

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| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

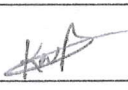
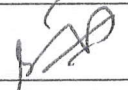

**FACT****FACT UDYOGAMANDAL COMPLEX**UCTS/TPS/2024-07
R0**TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 16:16:16****PAGE 2 of 6**


| No | Description | Details |
|-----|--|---|
| 1.0 | INSIDE DIMENSIONS | 890 MM X 570 MM |
| 1.1 | TOLERANCE | + 30 MM, -0.00 (-NIL ON BOTH WIDTH AND LENGTH.) |
| 2.0 | CAPACITY | 50 KGS. |
| 3.0 | BAG WEIGHT | |
| 3.1 | WEIGHT OF INDIVIDUAL BAG | 177 GMS. TOLERANCE \pm 3% |
| 3.2 | WEIGHT OF A BALE (250 BAGS) | 44.25 KGS. (NET WT.) TOLERANCE +3%/- 0.00% (No negative tolerance) |
| 4.0 | BREAKING STRENGTH | TESTING OF BREAKING STRENGTH SHALL BE DONE USING RAVELLED STRIP METHOD (CONSTANT RATE OF TRAVERSE) AND THE RATE OF TRAVERSE SHALL BE 300 MM/MINUTE. |
| 4.1 | i) WIDTHWISE ii) WIDTHWISE (Lamination Joint) | 91.8 KGF 91.8 KGF |
| 4.2 | LENGTHWISE | 91.8 KGF |
| 4.3 | BOTTOM SEAM | 40.8 KGF |
| 5.0 | DROP TEST | THE DROP TEST SHALL BE CARRIED OUT FOR EACH LOT SUPPLIED BY THE BAG SUPPLIER. FOR THIS TEST 4 nos. BAGS SHALL BE RANDOMLY SELECTED FROM EACH LOT. ALL BAGS SHALL BE SUBJECTED TO DROP TEST FROM A HEIGHT OF 3 MTRS FROM BOTH SIDES (4 DROP PER BAG). BAGS DURING DROP TEST WILL DROPPED ON THE STOMACH. NO BAGS SHOULD RUPTURE WHEN SUBJECTED TO MINIMUM 04 NOS. DROPS. |
| 6.0 | FABRIC | BAGS MADE OUT OF SINGLE PIECE OF LAMINATED PP FABRIC WOVEN ON CIRCULAR LOOM AS PER IS 9755:2021. ANY MIDDLE SEWN OR JOINTED BAGS WILL NOT BE ACCEPTABLE. THE FABRIC USED SHALL BE FREE FROM ALL MAJOR WEAVING DEFECTS LIKE GAPS, PICK POINTS, MISSING TAPES ETC. PP GRANULE FOR FABRIC & UV MASTER BATCH- Grade H030SG OR |

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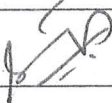

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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-07 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 16:16:16 | PAGE 3 of 6 |


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| | | EQUIVALENT. MIN 3% of 20% UV MASTER BATCH TO BE USED AND THE PP WOVEN FABRIC OF BAG SHALL BE MADE OUT OF UV STABILISED MATERIAL AND SHALL HAVE AT LEAST 50% OF ORIGINAL BREAKING STRENGTH WHEN TESTED AFTER THE SAME HAS BEEN EXPOSED TO UV RADIATION AND WEATHERING AS PER METHOD GIVEN IN ANNEXURE-F OF IS 9755:2021. FABRIC COLOUR- LIGHT BLUE (HEX CODE: ADD8E6). |
| 6.1 | TAPE | MONOAXIALLY ORIENTED PP TAPES HAVING 1000 DENIER AND MINIMUM WIDTH OF 2.5MM. THE FABRIC SHALL BE WOVEN FROM PP TAPES CONFORMING TO IS:11197. THE ELONGATION OF TAPES WHILE TESTING BREAKING STRENGTH SHALL BE IN THE RANGE OF 15 to 25%. TOLERANCE FOR DENIER: $\pm 10\%$ DENIER. |
| 6.2 | MESH | 10 x 10 PER SQ. INCH. |
| 6.3 | ENDS PER DM | 40. TOLERANCE ± 2 |
| 6.4 | PICKS PER DM | 40. TOLERANCE ± 2 |
| 6.5 | ELONGATION AT BREAK OF FABRIC | (5.0 CM X 20 CM STRIP METHOD) |
| 6.5.1 | LENGTHWISE | 20% |
| 6.5.2 | WIDTHWISE | 20% |
| 6.5.3 | TOLERANCE | RANGE: 15 to 25 % ON BOTH WIDTHWISE & LENGTHWISE. |
| 7.0 | LAMINATION | FABRIC SHALL BE LAMINATED OUTSIDE WITH PP GRANULES (GRADE H350EG/H350FG OR EQUIVALENT) 23 GMS/M2 (CORRESPONDING TO 100 GUAGE NOMINAL) WITH AN OVERLAP/OVERHANG OF 5 - 15MM. VIRGIN PP GRANULES SHALL BE USED AND THE LAMINATION SHALL BE FREE FROM PIN HOLES, PATCHES, BLISTERS, TEARS ETC. THE LAMINATION SHOULD COVER THE ENTIRE OUTSIDE AREA OF THE FABRIC USED. COLOR OF LAMINATION OF BAGS SHALL BE TRANSPARENT |
| 8.0 | LINER | i. COLOUR : WHITE ii. HMDPE WITH THICKNESS 50 MICRONS $\pm 10\%$ TOLERANCE |

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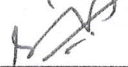
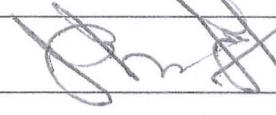
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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-07 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 16:16:16 | PAGE 4 of 6 |


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| | | <p>iii. LENGTH-915 MM X WIDTH-590 MM</p> <p>iv. HMHDPE GRADE-F55HM0003 or EQUIVALENT (LINER AND FABRIC SHOULD BE STICHED TOGETHER AT THE MOUTH AND AT BOTTOM. REF. CLAUSES 9.0 & 11.0)</p> |
| 9.0 | BAG MOUTH | <p>LINER AND FABRIC SHOULD BE STITCHED TOGETHER AT MOUTH BY MAKING SINGLE FOLD OF 25MM(LINER WITH FABRIC) FROM OUTER EDGE TOWARDS THE INSIDE OF THE BAG AND SINGLE ROW CHAIN STITCH AT 12MM FROM FOLD EDGE WITHOUT ANY LOOSE ENDS OR KNOTS BETWEEN THE STITCHES . THE STARTING AND CLOSING OF THE STITCH SHOULD NOT BE ON THE PRINTING SIDE</p> |
| 10.0 | BRANDING/PRINTING | <p>MULTI COLOUR, SINGLE SIDE AS PER MONOGRAM SPECIFIED BY FACT. THE FOLLOWING INK (FERTILISER GRADE) SHALL BE USED: HINDUSTAN INK BY HINDUSTAN INKS AND RESINS LTD., DAMAN.OR VARSHA INK OF VARSHA PRINTING INK MFG. CO., NAGPUR. SHADE OF THE BRANDING SHALL BE UNIFORM AND MATCHING FACT'S REQUIREMENTS.</p> |
| <p>THE INK USED SHOULD HAVE SCRATCH RESISTANT AIDS, GLOSSY, HIGH TECH/ POLYAMIDE QUALITY, ALKALI RESISTANT, SMUDGE FREE, BRIGHT IN COLOR, SHOULD NOT SMEAR IN CONTACT WITH WATER AND SHOULD NOT AFFECT THE FABRIC. ART WORK WILL BE PROVIDED BY FACT. PRINTING QUALITY SHALL BE CORONA TREATED SCUFF RESISTANT/VERY SHARP PRINT,NAIL PROOF/TAPE PROOF & EVEN COLORS THROUGHOUT THE LOT(PREFERABLY POLYAMIDE) ON ROLL TO ROLL PRINTING MACHINE. 3 SAMPLES OF THE BAGS OF THE REQUIRED COLOUR AS PER FACT REQUIREMENT SHALL BE SUBMITTED BEFORE STARTING BULK MANUFACTURING OF BAGS.ALL THE SAMPLES WILL BE SIGNED AND APPROVED SAMPLE WILL BE RETURNED WITH SIGNATURE OF THE AUTHORIZED REPRESENTATIVE OF FACT. ANY LOT SUPPLIED, IF FOUND DEVIATING IN COLOUR AS COMPARED TO APPROVED COLOUR WILL NOT BE ACCEPTED.</p> <p>EACH BAG SHALL BE COMPULSORILY MARKED WITH BIS STANDARD MARK, SWATCH BHARAT LOGO AND RECYCLING LOGO (PP) AS SHOWN IN IS 9755:2021, CLEARLY VISIBLE AT THE BOTTOM OF THE BAG.</p> <p>THE ENTIRE LOT OF PP BAGS SHALL BE LIABLE FOR REJECTION IN CASE THE TEST SAMPLES FAIL TO PASS THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION</p> | | |

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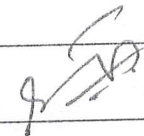
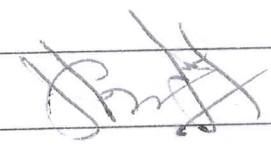
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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-07 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 16:16:16 | PAGE 5 of 6 |

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| | RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98 (RE APPROVED 2004) | |
| 11.0 | STITCHING | SINGLE FOLD, SINGLE STITCH AT MOUTH AND DOUBLE FOLD, DOUBLE STITCH AT BOTTOM WITH UV STABILISED THREAD/ MULTIFILAMENT YARN OF 1200 DENIER. STITCHING SHALL BE DONE AS PRESCRIBED IN IS 9755:2021. FOLD SHOULD OCCUR ON THE OPPOSITE SIDE OF THE PRINTING MADE ON THE BAG. |
| 12.0 | PACKING | 250 BAGS IN A BALE. BALES SHALL BE WRAPPED WITH HDPE/PP FABRIC OR HESSIAN CLOTH AND STITCHED PROPERLY TO WITHSTAND HAZARDS OF TRANSPORTATION. EACH BALE SHALL BE MARKED WITH NAME OF SUPPLIER, TYPE AND SIZE OF BAG, SERIAL NO. OF BALE, NO. OF BAGS IN THE BALE AND THE BALE WEIGHT |
| 13.0 | ASH CONTENT | ALL THE LOTS SUPPLIED SHALL BE TESTED FOR ASH CONTENT WHICH INCLUDES MAINLY CALCIUM CARBONATE CONTENT. ASH CONTENT IN BAGS SHALL BE 2.2% MAX (INCLUDING ALL IMPURITIES). IN CASE ASH CONTENT IS ABOVE 2.2% THE LOT WILL BE REJECTED. SAMPLES SHALL BE TAKEN OUT FROM THE LOT AS SPECIFIED IN IS 9755:2021 FOR TESTING ASH CONTENT. |
| 14.0 | CRITERIA FOR CONFORMITY | THE LOT SHALL BE CONSIDERED AS CONFORMING TO THE REQUIREMENTS FOR ACCEPTANCE IF ALL THE FOLLOWING CONDITIONS ARE SATISFIED. |
| | i. THE NUMBER OF DEFECTIVE BAGS IN CASE OF VISUAL INSPECTIONS, ENDS, PICKS AND DIMENSIONS IS UP TO 10% OF THE SAMPLE SIZE AFTER ROUNDING OFF THE FRACTION TO NEXT HIGHER INTEGER. ii. NONE OF THE BAG OR BALE OF 250 BAGS WEIGHS LESS THAN THE RESPECTIVE LOWER SPECIFIED LIMIT. HIGHER WEIGHT CAN BE ACCEPTED iii. THE AVERAGE BREAKING STRENGTH OF FABRIC IN BOTH LENGTHWISE, WIDTHWISE AND WIDTHWISE (LAMINATION JOINT) IS NOT LESS THAN THE VALUE | |

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| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

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|  FACT | FACT UDYOGAMANDAL COMPLEX | UCTS/TPS/2024-07 R0 |
| TECHNICAL PROCUREMENT SPECIFICATION | OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS WOVEN ON CIRCULAR LOOMS FOR PACKING BHARAT NPK 16:16:16 | PAGE 6 of 6 |

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| | <p>SPECIFIED AND NONE OF THE INDIVIDUAL VALUES IS MORE THAN 10% BELOW THE SPECIFIED VALUE. THE SAMPLES SELECTED FOR BREAKING STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> <p>iv. THE AVERAGE BREAKING STRENGTH OF THE FABRIC AT BOTTOM SEAM IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL BAG VALUE IS MORE THAN 10% BELOW THE SPECIFIED VALUE. THE SAMPLE SELECTED FOR SEAM STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> <p>v. NONE OF THE SAMPLE BAGS SHALL HAVE PERCENTAGE ELONGATION AND ASH CONTENT OUTSIDE THE SPECIFIED RANGE</p> <p>vi. NONE OF THE PP BAG SAMPLES AFTER EXPOSING TO UV RADIATION AND WEATHERING SHALL HAVE BREAKING STRENGTH LESS THAN 50 PERCENT OF THE ORIGINAL BREAKING STRENGTH.</p> <p>vii. NONE OF THE PP BAG SAMPLES SHALL FAIL IN THE DROP TEST</p> <p>viii. NONE OF THE PP BAG TEST SAMPLES SHALL FAIL IN THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98 (RE APPROVED 2004)</p> | | |
| 15.0 | <table border="1"> <tr> <td data-bbox="311 1344 598 1630">APPLICABLE STANDARD</td><td data-bbox="598 1344 1428 1630"> APPLICABLE STANDARD SHALL BE IS 9755:2021 FOR PP WOVEN BAGS FOR PACKING FERTILISERS. HOWEVER, IN CASES WHERE REQUIREMENTS IN THIS SPECIFICATION DIFFER FROM THOSE IN IS 9755:2021, REQUIREMENTS IN THIS SPECIFICATION SHALL PREVAIL OVER THOSE IN IS 9755:2021. </td></tr> </table> | APPLICABLE STANDARD | APPLICABLE STANDARD SHALL BE IS 9755:2021 FOR PP WOVEN BAGS FOR PACKING FERTILISERS. HOWEVER, IN CASES WHERE REQUIREMENTS IN THIS SPECIFICATION DIFFER FROM THOSE IN IS 9755:2021, REQUIREMENTS IN THIS SPECIFICATION SHALL PREVAIL OVER THOSE IN IS 9755:2021. |
| APPLICABLE STANDARD | APPLICABLE STANDARD SHALL BE IS 9755:2021 FOR PP WOVEN BAGS FOR PACKING FERTILISERS. HOWEVER, IN CASES WHERE REQUIREMENTS IN THIS SPECIFICATION DIFFER FROM THOSE IN IS 9755:2021, REQUIREMENTS IN THIS SPECIFICATION SHALL PREVAIL OVER THOSE IN IS 9755:2021. | | |

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| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX**UCTS/TPS/2024-04
R0TECHNICAL
PROCUREMENT
SPECIFICATIONOUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 15:15:15

PAGE 1 of 6

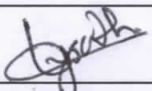
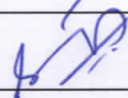

TECHNICAL PROCUREMENT SPECIFICATION (TPS)

FOR

OUTSIDE LAMINATED POLYPROPYLENE (PP) BAGS

FOR

PACKING BHARAT NPK 15:15:15**FACT UDYOGAMANDAL COMPLEX****KOCHI, INDIA****TPS No. UCTS/TPS/2024-04 R0**

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| 0 | 12/08/24 | ENQUIRY | VYSAKH | SYAMJITH | JAISON XAVIER |
| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX**UCTS/TPS/2024-04
R0**TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 15:15:15****PAGE 2 of 6**

| No | Description | Details |
|-----|--|---|
| 1.0 | INSIDE DIMENSIONS | 890 MM X 570 MM |
| 1.1 | TOLERANCE | + 30 MM, -0.00 (-NIL ON BOTH WIDTH AND LENGTH.) |
| 2.0 | CAPACITY | 50 KGS. |
| 3.0 | BAG WEIGHT | |
| 3.1 | WEIGHT OF INDIVIDUAL BAG | 177 GMS. TOLERANCE $\pm 3\%$ |
| 3.2 | WEIGHT OF A BALE (250 BAGS) | 44.25 KGS. (NET WT.) TOLERANCE +3%/- 0.00% (No negative tolerance) |
| 4.0 | BREAKING STRENGTH | TESTING OF BREAKING STRENGTH SHALL BE DONE USING RAVELLED STRIP METHOD (CONSTANT RATE OF TRAVERSE) AND THE RATE OF TRAVERSE SHALL BE 300 MM/MINUTE. |
| 4.1 | i) WIDTHWISE ii) WIDTHWISE (Lamination Joint) | 91.8 KGF 91.8 KGF |
| 4.2 | LENGTHWISE | 91.8 KGF |
| 4.3 | BOTTOM SEAM | 40.8 KGF |
| 5.0 | DROP TEST | THE DROP TEST SHALL BE CARRIED OUT FOR EACH LOT SUPPLIED BY THE BAG SUPPLIER. FOR THIS TEST 4 nos. BAGS SHALL BE RANDOMLY SELECTED FROM EACH LOT. ALL BAGS SHALL BE SUBJECTED TO DROP TEST FROM A HEIGHT OF 3 MTRS FROM BOTH SIDES (4 DROP PER BAG). BAGS DURING DROP TEST WILL DROPPED ON THE STOMACH. NO BAGS SHOULD RUPTURE WHEN SUBJECTED TO MINIMUM 04 NOS. DROPS. |
| 6.0 | FABRIC | BAGS MADE OUT OF SINGLE PIECE OF LAMINATED PP FABRIC WOVEN ON CIRCULAR LOOM AS PER IS 9755:2021. ANY MIDDLE SEWN OR JOINTED BAGS WILL NOT BE ACCEPTABLE. THE FABRIC USED SHALL BE FREE FROM ALL MAJOR WEAVING DEFECTS LIKE GAPS, PICK POINTS, MISSING TAPES ETC. PP GRANULE FOR FABRIC & UV MASTER BATCH- Grade H030SG OR |

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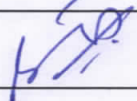

**FACT****FACT UDYOGAMANDAL COMPLEX**UCTS/TPS/2024-04
R0**TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 15:15:15****PAGE 3 of 6**

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| | | EQUIVALENT. MIN 3% of 20% UV MASTER BATCH TO BE USED AND THE PP WOVEN FABRIC OF BAG SHALL BE MADE OUT OF UV STABILISED MATERIAL AND SHALL HAVE AT LEAST 50% OF ORIGINAL BREAKING STRENGTH WHEN TESTED AFTER THE SAME HAS BEEN EXPOSED TO UV RADIATION AND WEATHERING AS PER METHOD GIVEN IN ANNEXURE-F OF IS 9755:2021. FABRIC COLOUR- LIGHT BLUE (HEX CODE: ADD8E6). |
| 6.1 | TAPE | MONOAXIALLY ORIENTED PP TAPES HAVING 1000 DENIER AND MINIMUM WIDTH OF 2.5MM. THE FABRIC SHALL BE WOVEN FROM PP TAPES CONFORMING TO IS:11197. THE ELONGATION OF TAPES WHILE TESTING BREAKING STRENGTH SHALL BE IN THE RANGE OF 15 to 25%. TOLERANCE FOR DENIER: $\pm 10\%$ DENIER. |
| 6.2 | MESH | 10 x 10 PER SQ. INCH. |
| 6.3 | ENDS PER DM | 40. TOLERANCE ± 2 |
| 6.4 | PICKS PER DM | 40. TOLERANCE ± 2 |
| 6.5 | ELONGATION AT BREAK OF FABRIC | (5.0 CM X 20 CM STRIP METHOD) |
| 6.5.1 | LENGTHWISE | 20% |
| 6.5.2 | WIDTHWISE | 20% |
| 6.5.3 | TOLERANCE | RANGE: 15 to 25 % ON BOTH WIDTHWISE & LENGTHWISE. |
| 7.0 | LAMINATION | FABRIC SHALL BE LAMINATED OUTSIDE WITH PP GRANULES (GRADE H350EG/H350FG OR EQUIVALENT) 23 GMS/M2 (CORRESPONDING TO 100 GAUGE NOMINAL) WITH AN OVERLAP/OVERHANG OF 5 - 15MM. VIRGIN PP GRANULES SHALL BE USED AND THE LAMINATION SHALL BE FREE FROM PIN HOLES, PATCHES, BLISTERS, TEARS ETC. THE LAMINATION SHOULD COVER THE ENTIRE OUTSIDE AREA OF THE FABRIC USED. COLOR OF LAMINATION OF BAGS SHALL BE TRANSPARENT |
| 8.0 | LINER | i. COLOUR : WHITE ii. HMDPE WITH THICKNESS 50 MICRONS $\pm 10\%$ TOLERANCE |

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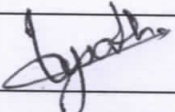
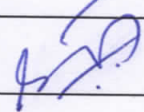
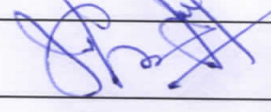
**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-04
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 15:15:15****PAGE 4 of 6**

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|---|-------------------|---|
| | | iii. LENGTH-915 MM X WIDTH-590 MM iv. HMHDPE GRADE-F55HM0003 or EQUIVALENT (LINER AND FABRIC SHOULD BE STICHED TOGETHER AT THE MOUTH AND AT BOTTOM. REF. CLAUSES 9.0 & 11.0) |
| 9.0 | BAG MOUTH | LINER AND FABRIC SHOULD BE STITCHED TOGETHER AT MOUTH BY MAKING SINGLE FOLD OF 25MM(LINER WITH FABRIC) FROM OUTER EDGE TOWARDS THE INSIDE OF THE BAG AND SINGLE ROW CHAIN STITCH AT 12MM FROM FOLD EDGE WITHOUT ANY LOOSE ENDS OR KNOTS BETWEEN THE STITCHES . THE STARTING AND CLOSING OF THE STITCH SHOULD NOT BE ON THE PRINTING SIDE |
| 10.0 | BRANDING/PRINTING | MULTI COLOUR, SINGLE SIDE AS PER MONOGRAM SPECIFIED BY FACT. THE FOLLOWING INK (FERTILISER GRADE) SHALL BE USED: HINDUSTAN INK BY HINDUSTAN INKS AND RESINS LTD., DAMAN.OR VARSHA INK OF VARSHA PRINTING INK MFG. CO., NAGPUR. SHADE OF THE BRANDING SHALL BE UNIFORM AND MATCHING FACT'S REQUIREMENTS. |
| <p>THE INK USED SHOULD HAVE SCRATCH RESISTANT AIDS, GLOSSY, HIGH TECH/ POLYAMIDE QUALITY, ALKALI RESISTANT, SMUDGE FREE, BRIGHT IN COLOR, SHOULD NOT SMEAR IN CONTACT WITH WATER AND SHOULD NOT AFFECT THE FABRIC. ART WORK WILL BE PROVIDED BY FACT. PRINTING QUALITY SHALL BE CORONA TREATED SCUFF RESISTANT/VERY SHARP PRINT,NAIL PROOF/TAPE PROOF & EVEN COLORS THROUGHOUT THE LOT(PREFERABLY POLYAMIDE) ON ROLL TO ROLL PRINTING MACHINE. 3 SAMPLES OF THE BAGS OF THE REQUIRED COLOUR AS PER FACT REQUIREMENT SHALL BE SUBMITTED BEFORE STARTING BULK MANUFACTURING OF BAGS.ALL THE SAMPLES WILL BE SIGNED AND APPROVED SAMPLE WILL BE RETURNED WITH SIGNATURE OF THE AUTHORIZED REPRESENTATIVE OF FACT. ANY LOT SUPPLIED, IF FOUND DEVIATING IN COLOUR AS COMPARED TO APPROVED COLOUR WILL NOT BE ACCEPTED.</p> <p>EACH BAG SHALL BE COMPULSORILY MARKED WITH BIS STANDARD MARK, SWATCH BHARAT LOGO AND RECYCLING LOGO (PP) AS SHOWN IN IS 9755:2021, CLEARLY VISIBLE AT THE BOTTOM OF THE BAG.</p> <p>THE ENTIRE LOT OF PP BAGS SHALL BE LIABLE FOR REJECTION IN CASE THE TEST SAMPLES FAIL TO PASS THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION</p> | | |

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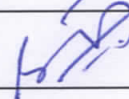

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-04
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 15:15:15****PAGE 5 of 6**

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| | RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98 (RE APPROVED 2004) | |
| 11.0 | STITCHING | SINGLE FOLD, SINGLE STITCH AT MOUTH AND DOUBLE FOLD, DOUBLE STITCH AT BOTTOM WITH UV STABILISED THREAD/ MULTIFILAMENT YARN OF 1200 DENIER. STITCHING SHALL BE DONE AS PRESCRIBED IN IS 9755. FOLD SHOULD OCCUR ON THE OPPOSITE SIDE OF THE PRINTING MADE ON THE BAG. |
| 12.0 | PACKING | 250 BAGS IN A BALE. BALES SHALL BE WRAPPED WITH HDPE/PP FABRIC OR HESSIAN CLOTH AND STITCHED PROPERLY TO WITHSTAND HAZARDS OF TRANSPORTATION. EACH BALE SHALL BE MARKED WITH NAME OF SUPPLIER, TYPE AND SIZE OF BAG, SERIAL NO. OF BALE, NO. OF BAGS IN THE BALE AND THE BALE WEIGHT |
| 13.0 | ASH CONTENT | ALL THE LOTS SUPPLIED SHALL BE TESTED FOR ASH CONTENT WHICH INCLUDES MAINLY CALCIUM CARBONATE CONTENT. ASH CONTENT IN BAGS SHALL BE 2.2% MAX (INCLUDING ALL IMPURITIES). IN CASE ASH CONTENT IS ABOVE 2.2% THE LOT WILL BE REJECTED. SAMPLES SHALL BE TAKEN OUT FROM THE LOT AS SPECIFIED IN IS 9755:2021 FOR TESTING ASH CONTENT. |
| 14.0 | CRITERIA FOR CONFORMITY | THE LOT SHALL BE CONSIDERED AS CONFORMING TO THE REQUIREMENTS FOR ACCEPTANCE IF ALL THE FOLLOWING CONDITIONS ARE SATISFIED. |
| | <ul style="list-style-type: none">i. THE NUMBER OF DEFECTIVE BAGS IN CASE OF VISUAL INSPECTIONS, ENDS, PICKS AND DIMENSIONS IS UP TO 10% OF THE SAMPLE SIZE AFTER ROUNDING OFF THE FRACTION TO NEXT HIGHER INTEGER.ii. NONE OF THE BAG OR BALE OF 250 BAGS WEIGHS LESS THAN THE RESPECTIVE LOWER SPECIFIED LIMIT. HIGHER WEIGHT CAN BE ACCEPTEDiii. THE AVERAGE BREAKING STRENGTH OF FABRIC IN BOTH LENGTHWISE, WIDTHWISE AND WIDTHWISE (LAMINATION JOINT) IS NOT LESS THAN THE VALUE | |

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| REV. NO. | DATE | STATUS | PREPARED | CHECKED | APPROVED |

**FACT****FACT UDYOGAMANDAL COMPLEX****UCTS/TPS/2024-04
R0****TECHNICAL
PROCUREMENT
SPECIFICATION****OUTSIDE LAMINATED POLYPROPYLENE (PP)
BAGS WOVEN ON CIRCULAR LOOMS FOR
PACKING BHARAT NPK 15:15:15****PAGE 6 of 6**

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| | <p>SPECIFIED AND NONE OF THE INDIVIDUAL VALUES IS MORE THAN 10% BELOW THE SPECIFIED VALUE. THE SAMPLES SELECTED FOR BREAKING STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> <p>iv. THE AVERAGE BREAKING STRENGTH OF THE FABRIC AT BOTTOM SEAM IS NOT LESS THAN THE VALUE SPECIFIED AND NONE OF THE INDIVIDUAL BAG VALUE IS MORE THAN 10% BELOW THE SPECIFIED VALUE. THE SAMPLE SELECTED FOR SEAM STRENGTH TESTS SHALL BE FREE FROM DEFECTS IN VISUAL INSPECTION, DIMENSIONS, ENDS, PICKS AND MASS REQUIREMENTS.</p> <p>v. NONE OF THE SAMPLE BAGS SHALL HAVE PERCENTAGE ELONGATION AND ASH CONTENT OUTSIDE THE SPECIFIED RANGE</p> <p>vi. NONE OF THE PP BAG SAMPLES AFTER EXPOSING TO UV RADIATION AND WEATHERING SHALL HAVE BREAKING STRENGTH LESS THAN 50 PERCENT OF THE ORIGINAL BREAKING STRENGTH.</p> <p>vii. NONE OF THE PP BAG SAMPLES SHALL FAIL IN THE DROP TEST</p> <p>viii. NONE OF THE PP BAG TEST SAMPLES SHALL FAIL IN THE TAPE TEST, ALKALI TEST AND STANDARD TEST FOR ABRASION RESISTANCE OF PRINTED MATERIALS BY SUTHERLAND RUB TESTER: AS PER ASTM D5264-98 (RE APPROVED 2004)</p> |
| 15.0 | <p>APPLICABLE STANDARD</p> <p>APPLICABLE STANDARD SHALL BE IS 9755:2021 FOR PP WOVEN BAGS FOR PACKING FERTILISERS. HOWEVER, IN CASES WHERE REQUIREMENTS IN THIS SPECIFICATION DIFFER FROM THOSE IN IS 9755:2021, REQUIREMENTS IN THIS SPECIFICATION SHALL PREVAIL OVER THOSE IN IS 9755:2021.</p> |

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