# National Accreditation Board for Testing and Calibration Laboratories

## SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 1 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| Permanent Facility | | | | |
| 1 | CHEMICAL- PETROLEUM AND PRODUCTS | 1, 3 Butadiene | Hydrogen Peroxide (H2O2) | ASTM 5799 |
| 2 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | 1,2 Butadiene | ASTM D-2593 |
| 3 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | 1,3 Butadiene Purity | ASTM D-2593 |
| 4 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 Butadiene | Carbonyl Number | ASTM D 4423 |
| 5 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | Dimer | ASTM D-2426 |
| 6 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | Ethyl acetylene | ASTM D-2593 |
| 7 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | Methyl acetylene | ASTM D-2593 |
| 8 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | N-Methyl-2-pyrrolidone (NMP) | BASF |
| 9 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 Butadiene | Non Volatile Matter (NVM) | ASTM 1025 |
| 10 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | p TBC | ASTM D-1157 |
| 11 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | Propadiene | ASTM D-2593 |
| 12 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 Butadiene | Sulphur | ASTM D6667-14 |
| 13 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3 BUTADIENE | Vinyl acetylene | ASTM D-2593 |
| 14 | CHEMICAL- PETROLEUM AND PRODUCTS | 1,3, BUTADIENE | PHYSICAL APPEARANCE | IOCL/PNC/QM/01/SOP |
| 15 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | 1,4-Dioxane | ASTM D-7504 |
| 16 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Acid Wash Colour | ASTM D-848 |
| 17 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Bromine Index | ASTM D-2710 |
| 18 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Density at 15 deg C | ASTM D-4052 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 2 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 19 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Distillation (DP) | ASTM D-850 |
| 20 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Non aromatic | ASTM D-7504 |
| 21 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | PHYSICAL APPEARANCE | IOCL/PNC/QM/01/SOP |
| 22 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Purity | ASTM D-7504 |
| 23 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Solidification Point | ASTM D-852 |
| 24 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Toluene | ASTM D-7504 |
| 25 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Total Nitrogen | ASTM D-4629 |
| 26 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | Total Sulfur | ASTM D-5453 |
| 27 | CHEMICAL- PETROLEUM AND PRODUCTS | BENZENE | WATER CONTENT | ASTM E1064 |
| 28 | CHEMICAL- PETROLEUM AND PRODUCTS | DI ETHYLENE GLYCOL | PHYSICAL APPEARANCE | IOCL/PNC/QM/01/SOP |
| 29 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol | UV Transmittance @ 220, | ASTM E 2193 |
| 30 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Acidity as Acetic Acid | ASTM D-1613 |
| 31 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Ash Content | ASTM D-482 |
| 32 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Chloride as Cl- | ASTM E-2469 |
| 33 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Colour of clear Liquids | ASTM D-1209 |
| 34 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | DEG Purity | ASTM E-2409 |
| 35 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Distillation Range (DP) | ASTM D-1078 |
| 36 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Distillation Range (IBP) | ASTM D-1078 |
| 37 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Iron as Fe++ | ASTM E-394 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 3 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 38 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | MEG in DEG | ASTM E-2409 |
| 39 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Specific Gravity at 20 deg C | ASTM D-4052 |
| 40 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | TEG in DEG | ASTM E-2409 |
| 41 | CHEMICAL- PETROLEUM AND PRODUCTS | Di Ethylene Glycol (DEG) | Water | ASTM E-203 |
| 42 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol | Distillation Range (IBP) | ASTM D 1078 |
| 43 | CHEMICAL- PETROLEUM AND PRODUCTS | MONO ETHYLENE GLYCOL | PHYSICAL APPEARANCE | IOCL/PNC/QM/01/SOP |
| 44 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol | Specific Gravity at 20 deg C | ASTM D 4052 |
| 45 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Acidity as Acetic Acid | ASTM D-1613 |
| 46 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Aldehyde Expressed as (Formaldehyde/Acetaldehyde) | ASTM E-2313 |
| 47 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Ash Content | ASTM D-482 |
| 48 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Chloride as Cl- | ASTM E-2469 |
| 49 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Colour of clear Liquids | ASTM D-1209 |
| 50 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | DEG in MEG | ASTM E-2409 |
| 51 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Distillation Range (DP) | ASTM D-1078 |
| 52 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Iron as Fe++. | ASTM E-394 |
| 53 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | MEG Purity | ASTM E-2409 |
| 54 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Sulphate | DC-336 SD |
| 55 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | UV Transmittance at 220/250/275/350 nm Option A(N2 Sparged)/B(Non-Sparged) | ASTM E-2193 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 4 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 56 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono Ethylene Glycol (MEG) | Water | ASTM E-203 |
| 57 | CHEMICAL- PETROLEUM AND PRODUCTS | Mono, Di, Tri Ethylene Glycol | Density @ 20 Degree Celsius | ASTM 4052 |
| 58 | CHEMICAL- PETROLEUM AND PRODUCTS | TRI ETHYLENE GLYCOL | PHYSICAL APPEARANCE | IOCL/PNC/QM/01/SOP |
| 59 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | Ash content. | ASTM D-482 |
| 60 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | Colour of Clear Liquids | ASTM D-1209 |
| 61 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | DEG in TEG | ASTM E-2409 |
| 62 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | Distillation Range (DP) | ASTM D-1078 |
| 63 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | Distillation range (IBP) | ASTM D-1078 |
| 64 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | PEG in TEG | ASTM E-2409 |
| 65 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | Specific Gravity at 20 deg C | ASTM D-4052 |
| 66 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | TEG Purity | ASTM E-2409 |
| 67 | CHEMICAL- PETROLEUM AND PRODUCTS | Tri Ethylene Glycol (TEG) | Water | ASTM E-203 |
| 68 | CHEMICAL- PLASTIC & RESINS | LINEAR LOW DENSITY POLYETHYLENE | FINES | LTM PE212 |
| 69 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Irgafos 168 | ASTM D6953 |
| 70 | CHEMICAL- PLASTIC & RESINS | HDPE | Flow Rate Ratio @ 21.6kg/5kg | ASTM D1238 |
| 71 | CHEMICAL- PLASTIC & RESINS | HDPE | FNCT @ 80*C | LTM E16 |
| 72 | CHEMICAL- PLASTIC & RESINS | HDPE | HYDROSTATIC STRIENGTH OF PIPE | IS 4984/LTM E15 |
| 73 | CHEMICAL- PLASTIC & RESINS | HDPE | I-1010 OF HDPE | ASTM 6953 |
| 74 | CHEMICAL- PLASTIC & RESINS | HDPE | MFI @ 190*C/21.6 kg | ASTM D 1238 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 5 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 75 | CHEMICAL- PLASTIC & RESINS | HDPE | MFI @ 21.6kg | ASTMD1238 |
| 76 | CHEMICAL- PLASTIC & RESINS | HDPE | SWELL RATIO OF HDPE | LTM E11 |
| 77 | CHEMICAL- PLASTIC & RESINS | HDPE | UV Stabilizer | PE 342S |
| 78 | CHEMICAL- PLASTIC & RESINS | HDPE , PP, LLDPE | CONTAMINATION (OXIDIZED/COLOR PELLETS) | MTM17064E |
| 79 | CHEMICAL- PLASTIC & RESINS | HDPE , PP, LLDPE | CONTAMINATION( FOREIGN BODIES) | MTM17064E |
| 80 | CHEMICAL- PLASTIC & RESINS | HDPE, PP,LLDPE | Contamination( Number of Corpuscles or Black Spots) | MTM17064E |
| 81 | CHEMICAL- PLASTIC & RESINS | HDPE,PP,LLDPE | Contamination( A- Pellet Anomalies) | MTM17064 |
| 82 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene | Weight of 100 pellets | LTME 4 |
| 83 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Calcium Stearate in HDPE | ASTM D 6247 |
| 84 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Dart Impact | ASTM D 1709 |
| 85 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Density | D 1505 |
| 86 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Gel Fish Eye | LTM E 12 |
| 87 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Irgafos 168 | ASTM D 6247 |
| 88 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Melt Flow Index | ASTM D-1238D |
| 89 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Melt Flow Index @ 5 kg | ASTM D-1238D |
| 90 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Moisture | ASTM D 6869 |
| 91 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Oxidative Induction Time | ASTM D-3895 |
| 92 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Volatile | LTM E1 |
| 93 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Yellowness Index | ASTM E-313 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 6 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 94 | CHEMICAL- PLASTIC & RESINS | High Density Polyethylene (HDPE) | Zinc Stearate | ASTM D 6247 |
| 95 | CHEMICAL- PLASTIC & RESINS | LINEAR LOW DENSITY POLYETHYLENE | Volatile(CYCLO HEXANE) | LTP#PE-368 |
| 96 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Density | ASTM D-792A |
| 97 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Density | ASTM D-792A |
| 98 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Fines | PE 212 |
| 99 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Irganox 1010 | ASTM D6953 |
| 100 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Melt Flow Index | ASTM D-1238D |
| 101 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Melt Flow Index | ASTM D-1238D |
| 102 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Melt Flow Index | ASTM D-1238D |
| 103 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Melt Flow Index | ASTM D-1238D |
| 104 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Pellet Count | LTPPE 220 |
| 105 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Whiteness Index | ASTM E-313 |
| 106 | CHEMICAL- PLASTIC & RESINS | Linear Low Density Polyethylene (LLDPE) | Yellowness Index | ASTM E-313 |
| 107 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | AO-1330 | ASTM D6042 |
| 108 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | AO-3114 | ASTM D6042 |
| 109 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | CHLORINE CONTENT | MA15794 |
| 110 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | CLARIFIER (NA 21) | AAS |
| 111 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | CLARIFIER (NX 8000) | MA151007/FTIR |
| 112 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | DHT 4A OF PP | ASTM D6247 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 7 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 113 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | DSTDP OF PP | ASTM D6247 |
| 114 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | ETHYLENE CONTENT | MTM 15852 |
| 115 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | ETHYLENE CONTENT OF PP | MTM 15852 |
| 116 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | FILTERBILITY INDEX | MA 17338 |
| 117 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | GEL COUNT OF 50 micron film >0.2 mm | MA17108 |
| 118 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | GEL COUNT of 50 micron film 0.7 - 1.5 mm | MT17108 |
| 119 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | GEL COUNT of micron film (0.5-0.7 mm) | MA17108 |
| 120 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | GLOSS (1mm inl.molded) | ASTM D523 |
| 121 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | GMS 90 (ANTI STATIC) | MA151007 |
| 122 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | GMS 90 (ANTI STATIC) | MA151007 |
| 123 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | HAZE (1 mm inj.molded) | ASTM D1003 |
| 124 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | HPN 20E OF PP | ASTM D6247 |
| 125 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | MOISTURE | ASTM D6869 |
| 126 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | NUCLEATING AGENTS | AAS |
| 127 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | SILICA OF PP | ASTM D6247 |
| 128 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | SLIP OF PP | ASTM D6042 |
| 129 | CHEMICAL- PLASTIC & RESINS | POLY PROPYLENE | ZNST OF PP | ASTM D6247 |
| 130 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Ash Content | ASTM D-5630A&B |
| 131 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Calcium Stearate | ASTM D 6247 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 8 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 132 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Flexural Modulus | ASTM D-790 |
| 133 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Irgafos 168 | ASTM D 6042 |
| 134 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Irganox 1010 | ASTM D 6042 |
| 135 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Izod Impact | ASTM D-256 |
| 136 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Izod Impact | ASTM D-256 |
| 137 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Izod Impact | ASTM D-256 |
| 138 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Melt Flow Index | ASTM D-1238B |
| 139 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Melt Flow Index | ASTM D-1238B |
| 140 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Melt Flow Index | ASTM D-1238B |
| 141 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Pellet count per gram | MTM17351 |
| 142 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Xylene Soluble | ASTM D-5492 |
| 143 | CHEMICAL- PLASTIC & RESINS | Poly Propylene (PP) | Yellowness Index | ASTM E-313 |
| 144 | CHEMICAL- PLASTIC & RESINS | SWING | AO-1330 | ASTM D6953 |
| 145 | CHEMICAL- PLASTIC & RESINS | SWING | CAST OF SWING | ASTM D6247 |
| 146 | CHEMICAL- PLASTIC & RESINS | SWING | COF OF SWING | ASTM D 1894 |
| 147 | CHEMICAL- PLASTIC & RESINS | SWING | COF OF SWING | ASTM D 1894 |
| 148 | CHEMICAL- PLASTIC & RESINS | SWING | COF OF SWING | ASTM D 1894 |
| 149 | CHEMICAL- PLASTIC & RESINS | SWING | COF OF SWING | ASTM D 1894 |
| 150 | CHEMICAL- PLASTIC & RESINS | SWING | DART IMPACT | ASTM D1709 |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 9 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 151 | CHEMICAL- PLASTIC & RESINS | SWING | GEL COUNT OF SWING | LTE840 |
| 152 | CHEMICAL- PLASTIC & RESINS | SWING | I-1076 OF SWING | ASTM D6953 |
| 153 | CHEMICAL- PLASTIC & RESINS | SWING | I-168 of Swing | ASTMD6953 |
| 154 | CHEMICAL- PLASTIC & RESINS | SWING | I-168 OF SWING | LTE-840 |
| 155 | CHEMICAL- PLASTIC & RESINS | SWING | MFI @ 190*C 2.16kg | D1238 |
| 156 | CHEMICAL- PLASTIC & RESINS | SWING | MFI @ 190*C 6.48kg | D1238 |
| 157 | CHEMICAL- PLASTIC & RESINS | SWING | PPA | Dynamer Polymer Processing Additive |
| 158 | CHEMICAL- PLASTIC & RESINS | SWING | RM68i of Swing | ASTM 6953 |
| 159 | CHEMICAL- PLASTIC & RESINS | SWING | SILICA OF SWING | ASTM D 6247 |
| 160 | CHEMICAL- PLASTIC & RESINS | SWING | SLIP OF SWING | PE-342S |
| 161 | CHEMICAL- PLASTIC & RESINS | SWING | STRESS EXPONENT | PE 200S |
| 162 | CHEMICAL- PLASTIC & RESINS | SWING | UV STABLIZER | PE 342S |
| 163 | CHEMICAL- PLASTIC & RESINS | SWING | UV STABLIZER | PE 342S |
| 164 | CHEMICAL- PLASTIC & RESINS | SWING | YELLOWNESS INDEX | ASTM E313 |
| 165 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Anion in Water (Br-) | ASTM D-4327 |
| 166 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Anion in Water(NO3-) | ASTM D-4327 |
| 167 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Anion in Water(O-PO4) | ASTM D-4327 |
| 168 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Biological Oxygen Demand, 3 days at 27 deg C | IS-3025(Part-44) |
| 169 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Chemical Oxygen Demand | APHA-5220C |

# SCOPE OF ACCREDITATION

**Laboratory Name :** PANIPAT NAPHTHA CRACKER QUALITY CONTROL LABORATORY, PANIPAT REFINERY AND PETROCHEMICAL COMPLEX, INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY, PANIPAT, HARYANA, INDIA

**Accreditation Standard** ISO/IEC 17025:2017

**Certificate Number** TC-7771 **Page No** 10 of 10

**Validity** 10/10/2021 to 09/10/2023 **Last Amended on** 31/12/2021

| S.No | Discipline / Group | Materials or Products tested | Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed | Test Method Specification against which tests are performed and / or the techniques / equipment used |
|---|---|---|---|---|
| 170 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Chloride | ASTM D-4327 |
| 171 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Chloride | ASTM D-512 B |
| 172 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Chromium Hexavalent | APHA-3500-C B |
| 173 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Cyanide as CN- | APHA-4500-CN- E |
| 174 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Fluoride as F- | APHA-4500-F- D |
| 175 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Fluoride as F- | ASTM D-4327 |
| 176 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Hardness | ASTM D-1126 |
| 177 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Hydrazine | ASTM D-1385 |
| 178 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Oil & Grease | IS-3025(Part-39) |
| 179 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | pH | IS-3025(Part-II) |
| 180 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Phenol | APHA-5530D |
| 181 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Sulphate | ASTM D-4327 |
| 182 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Sulphate | IS-3025(Part-24) |
| 183 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Sulphide as S2 | APHA-4500-S2 F |
| 184 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Total Dissolved Solids | IS-3025(Part-16) |
| 185 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Total Suspended Solids | IS-3025(Part-17) |
| 186 | CHEMICAL- POLLUTION & ENVIRONMENT | Waste Water (Effluent Water) | Turbidity | IS-3025(Part-10) |