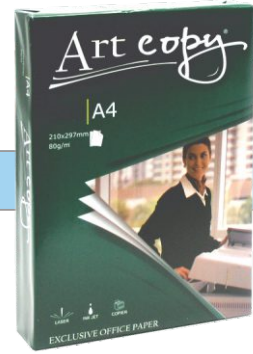


ARTCOPY

Product: Cμ3080



Product Specifications

| PARAMETERS | REFERENCE | TARGET | MAXIMUM | MINIMUM |
|------------------------------|-----------|--------|---------|---------|
| BasisWeight,g/m ² | ISO 536 | 80,0 | 83,2 | 76,8 |
| Thickness,mm | ISO 534 | 106 | 110 | 102 |
| CIEWhiteness,# | ISO 11475 | 171 | 174 | 168 |

Typical Values

| PARAMETERS | REFERENCE | TARGET | MAXIMUM | MINIMUM |
|--------------------------------|-------------|--------|---------|---------|
| BendtsenAirpermeability,ml/min | ISO 5636-3 | --- | 1100 | --- |
| BendtsenRoughness,ml/min | ISO 8791-2 | 160 | 190 | 130 |
| StiffnessMD,mN | ISO 2493 | --- | --- | 115 |
| StiffnessCD,mN | ISO 2493 | --- | --- | 55,0 |
| TensileMD,kN/m | ISO 1924-2 | --- | --- | 4,70 |
| Moisture,% | ISO 287 | 3,9 | 4,1 | 3,7 |
| Formation,# | ITE 620/264 | --- | --- | 50 |
| BrightnessD65/10°,% | ISO 2470 | 113,00 | 114,00 | 112,00 |
| Opacity,% | ISO 2471 | 95 | --- | 93,5 |

Preparedby: ProductDevelopmentand TechnicalServices

Approvedby: PaperMillDirector

Printingdate:

STATEMENT

PORTUCEL SOPORCEL GROUP STATES THAT ALL PAPERS PRODUCED AT SETÚBAL MILL COMPLY WITH ISO 9706:1994 – PAPER FOR DOCUMENTS – REQUIREMENTS FOR PERMANENCE.

| Properties | ISO 9706 Requirements | | Portucel Products (Typical Values)* | |
|---|------------------------------|----------------|--|--|
| Grammage, gsm | 60 | >70 | 60 | 80 |
| Tearing Resistance, mN | 290 | >350 | MD: >490 CD: >420 | MD: >640 CD: >560 |
| Alkali Reserve, mol/Kg | >0,4 | | 4,1 | |
| Resistance to oxidation, (Index Kappa) | <5 | | <5 | |
| pH value of aqueous extract | 7,5 to 10 | | 8,1 | |

** All values are obtained in Laboratory Accredited by ISO/IEC 17025*

DATE: 27th of JULY, 2005

CUSTOMER SERVICE RESPONSIBLE: VITOR CRESPO

SIGNATURE:

