

## Características Técnicas

|   |                    |                    |      |
|---|--------------------|--------------------|------|
| <b>• Densidad</b><br>ISO 1183   |                    |                    |      |
| Campo   | Unidad             | Valor en 438-4 CGF |      |
| Masa  | g/cm <sup>3</sup>  | ≥1,35              |      |
| <b>• Resistencia a abrasión superficial</b><br>EN 438 2 - 10            |                    |                    |      |
| Punto inicial   | Ciclos             | ≥150               |      |
| Punto medio   | Ciclos             | ≥350               |      |
| <b>• Resistencia al rayado</b><br>EN 438 2 - 25                         |                    |                    |      |
| Acabado brillo  | Newtons            | ≥2                 |      |
| Otros acabados  | Newtons            | ≥3                 |      |
| <b>• Resistencia al impacto</b><br>EN 438 2 - 21                        |                    |                    |      |
| Caída bola e≤6mm  | mm. altura         | ≥1400              |      |
| Caída bola e>6mm  | mm. altura         | ≥1800              |      |
| Diám. Punzonamiento   | mm.                | ≤10                |      |
| <b>• Resistencia al calor seco (180°)</b><br>EN 438 2 - 16              |                    |                    |      |
| Acabado brillo  | Grado Tabla II     | ≥3                 |      |
| Otros acabados  | Grado Tabla II     | ≥4                 |      |
| <b>• Resistencia al calor húmedo</b><br>EN 12721                        |                    |                    |      |
| Acabado brillo  | Grado Tabla II     | >3                 |      |
| Otros acabados  | Grado Tabla II     | >4                 |      |
| <b>• Resistencia inmersión en agua hirviendo</b><br>EN 438 2 - 12       |                    |                    |      |
| Incremento masa   | % max 2e≤5mm.      | ≤5,0               | ≤7,0 |
|   | e>5mm.             | ≥2,0               | ≥3,0 |
| Incremento espesor  | % max 2e≤5mm.      | ≤6,0               | ≤9,0 |
|   | e>5mm.             | ≤2,0               | ≤6,0 |
| Grado acab. brillo  | Grado Tabla II     | ≥3                 |      |
| Grado otros acab.   | Grado Tabla II     | ≥4                 |      |
| <b>• Estabilidad dimensional a temperatura elevada</b><br>EN 438 2 - 17 |                    |                    |      |
| Cambio dimensional acumulado  | % 2e≤5mm long.     | ≤0,40              |      |
|   | % 2e≤5mm transv.   | ≤0,80              |      |
|   | % e>5mm long.      | ≤0,30              |      |
|   | % e>5mm transv.    | ≤0,60              |      |
| <b>• Resistencia al vapor de agua</b><br>EN 438 2 - 14                  |                    |                    |      |
| Aspecto Tabla II  | Grado acab. brillo | ≥3                 |      |
|   | Grado otros acab.  | ≥4                 |      |
| <b>• Resistencia al manchado</b><br>EN 438 2 - 26                       |                    |                    |      |
| Grupo: 1/2 Tabla III  | Grado Tabla II     | 5                  |      |
| Grupo: 3 Tabla III  | Grado Tabla II     | ≥4                 |      |
| <b>• Resistencia a la quemadura por cigarrillo</b><br>EN 438 2 - 30     |                    |                    |      |
| Aspecto   | Grado Tabla II     | ≥3                 |      |
| <b>• Comportamiento al fuego</b><br>UNE 23.727                          |                    |                    |      |
| Calificación  | Clase              | M 3                | M 1  |
| <b>• Solidez a la luz</b> (Arco de Xenón)<br>EN 438 2 - 27              |                    |                    |      |
| Contraste   | Escala de grises   | 4 - 5              |      |
| <b>• Resistencia al agrietamiento</b><br>EN 438 2 - 24                  |                    |                    |      |
| Aspecto   | Grado Tabla II     | ≥4                 |      |
| <b>• Módulo de flexión</b><br>ISO 178                                   |                    |                    |      |
| Esfuerzo  | mpa                | ≥9000              |      |
| <b>• Resistencia a flexión</b><br>ISO 178                               |                    |                    |      |
| Esfuerzo  | mpa                | ≥80                |      |
| <b>• Índice de oxígeno</b><br>ISO 4589 - 2                              |                    |                    |      |
| Índice  | %                  | ≥30                | ≥45  |

## Technical Features

|   |                       |                    |      |
|---|-----------------------|--------------------|------|
| <b>• Density</b><br>ISO 1183  |                       |                    |      |
| Field   | Unit                  | Value in 438-4 CGF |      |
| Mass  | g/cm <sup>3</sup>     | ≥1,35              |      |
| <b>• Surface abrasion resistance</b><br>EN 438 2 - 10               |                       |                    |      |
| Starting point  | Cycles                | ≥150               |      |
| Midpoint  | Cycles                | ≥350               |      |
| <b>• Resistance to scratch</b><br>EN 438 2 - 25                     |                       |                    |      |
| Brightness finish   | Newtons               | ≥2                 |      |
| Others finish   | Newtons               | ≥3                 |      |
| <b>• Resistance to shock</b><br>EN 438 2 - 21                       |                       |                    |      |
| Drop ball e≤6mm   | mm. height            | ≥1400              |      |
| Drop ball e>6mm   | mm. height            | ≥1800              |      |
| Punching diameter   | mm.                   | ≤10                |      |
| <b>• Resistance to dry heat (180°)</b><br>EN 438 2 - 16             |                       |                    |      |
| Brightness finish   | Grade Chart II        | ≥3                 |      |
| Others finish   | Grade Chart II        | ≥4                 |      |
| <b>• Humid heat resistance</b><br>EN 12721                          |                       |                    |      |
| Brightness finish   | Grade Chart II        | >3                 |      |
| Others finish   | Grade Chart II        | >4                 |      |
| <b>• Resistance to immersion in boiling water</b><br>EN 438 2 - 12  |                       |                    |      |
| Increase mass   | % max 2e≤5mm.         | ≤5,0               | ≤7,0 |
|   | e>5mm.                | ≥2,0               | ≥3,0 |
| Increased thickness   | % max 2e≤5mm.         | ≤6,0               | ≤9,0 |
|   | e>5mm.                | ≤2,0               | ≤6,0 |
| Degree gloss finish   | Grade Chart II        | ≥3                 |      |
| Other finishes degree   | Grade Chart II        | ≥4                 |      |
| <b>• Dimensional stability of high temperature</b><br>EN 438 2 - 17 |                       |                    |      |
| Dimensional cumulative change                                       | % 2e≤5mm long.        | ≤0,40              |      |
|   | % 2e≤5mm transv.      | ≤0,80              |      |
|   | % e>5mm long.         | ≤0,30              |      |
|   | % e>5mm transv.       | ≤0,60              |      |
| <b>• Resistance to water vapor</b><br>EN 438 2 - 14                 |                       |                    |      |
| Appearance Chart II   | Degree gloss finish   | ≥3                 |      |
|   | Other finishes degree | ≥4                 |      |
| <b>• Resistance to spotted</b><br>EN 438 2 - 26                     |                       |                    |      |
| Group: 1/2 Chart III  | Grade Chart II        | 5                  |      |
| Group: 3 Chart III  | Grade Chart II        | ≥4                 |      |
| <b>• Resistance to burn a cigarette</b><br>EN 438 2 - 30            |                       |                    |      |
| Appearance  | Grade Chart II        | ≥3                 |      |
| <b>• Behavior on fire</b><br>UNE 23.727                             |                       |                    |      |
| Skill   | Class                 | M 3                | M 1  |
| <b>• Solidity in the light</b> (Xenon arc)<br>EN 438 2 - 27         |                       |                    |      |
| Contrast  | Scale of greys        | 4 - 5              |      |
| <b>• Resistance to cracking</b><br>EN 438 2 - 24                    |                       |                    |      |
| Appearance  | Grade Chart II        | ≥4                 |      |
| <b>• Modulo bending</b><br>ISO 178                                  |                       |                    |      |
| Effort  | mpa                   | ≥9000              |      |
| <b>• Resistance to bending</b><br>ISO 178                           |                       |                    |      |
| Effort  | mpa                   | ≥80                |      |
| <b>• Oxygen index</b><br>ISO 4589 - 2                               |                       |                    |      |
| Index   | %                     | ≥30                | ≥45  |

## Caractéristiques Techniques

|  |                             |                       |      |
|--|-----------------------------|-----------------------|------|
| <b>• Densité</b><br>ISO 1183   |                             |                       |      |
| Field  | Unité                       | Valeur dans 438-4 CGF |      |
| Masse  | g/cm <sup>3</sup>           | ≥1,35                 |      |
| <b>• Surface de résistance à l'abrasion</b><br>EN 438 2 - 10             |                             |                       |      |
| Point démarrage  | Cycles                      | ≥150                  |      |
| Point médian   | Cycles                      | ≥350                  |      |
| <b>• Résistance aux rayures</b><br>EN 438 2 - 25                         |                             |                       |      |
| Un fini brillant   | Newtons                     | ≥2                    |      |
| D'autres finitions   | Newtons                     | ≥3                    |      |
| <b>• Résistance à l'impacte</b><br>EN 438 2 - 21                         |                             |                       |      |
| Chute de balle e≤6mm   | mm. taille                  | ≥1400                 |      |
| Chute de balle e>6mm   | mm. taille                  | ≥1800                 |      |
| Poinçon de diamètre  | mm.                         | ≤10                   |      |
| <b>• Résistance à la chaleur sèche (180°)</b><br>EN 438 2 - 16           |                             |                       |      |
| Un fini brillant   | Tableau II e année          | ≥3                    |      |
| D'autres finitions   | Tableau II e année          | ≥4                    |      |
| <b>• Résistance à la chaleur humide</b><br>EN 12721                      |                             |                       |      |
| Un fini brillant   | Tableau II e année          | >3                    |      |
| D'autres finitions   | Tableau II e année          | >4                    |      |
| <b>• Résistance à l'immersion dans l'eau bouillante</b><br>EN 438 2 - 12 |                             |                       |      |
| Augmentation massive   | % max 2e≤5mm.               | ≤5,0                  | ≤7,0 |
|  | e>5mm.                      | ≥2,0                  | ≥3,0 |
| Augmentation de l'épaisseur  | % max 2e≤5mm.               | ≤6,0                  | ≤9,0 |
|  | e>5mm.                      | ≤2,0                  | ≤6,0 |
| E année terminée luminosité  | Tableau II e année          | ≥3                    |      |
| Niveau d'autres finitions  | Tableau II e année          | ≥4                    |      |
| <b>• Stabilité dimensionnelle à haute température</b><br>EN 438 2 - 17   |                             |                       |      |
| Changement dimensions accumulés  | % 2e≤5mm long.              | ≤0,40                 |      |
|  | % 2e≤5mm transv.            | ≤0,80                 |      |
|  | % e>5mm long.               | ≤0,30                 |      |
|  | % e>5mm transv.             | ≤0,60                 |      |
| <b>• Résistance à la vapeur d'eau</b><br>EN 438 2 - 14                   |                             |                       |      |
| Aspect Tableau II  | E année terminée luminosité | ≥3                    |      |
|  | Niveau d'autres finitions   | ≥4                    |      |
| <b>• Résistance aux taches</b><br>EN 438 2 - 26                          |                             |                       |      |
| Grupo: 1/2 Tabla III   | Tableau II e année          | 5                     |      |
| Grupo: 3 Tabla III   | Tableau II e année          | ≥4                    |      |
| <b>• Résistance à la brûler de cigarette</b><br>EN 438 2 - 30            |                             |                       |      |
| Apparence  | Tableau II e année          | ≥3                    |      |
| <b>• Comportement au feu</b><br>UNE 23.727                               |                             |                       |      |
| Note   | Gentil                      | M 3                   | M 1  |
| <b>• Solidité à la lumière</b> (Arc au Xenón)<br>EN 438 2 - 27           |                             |                       |      |
| Contraste  | Niveaux de gris             | 4 - 5                 |      |
| <b>• Résistance à la fissuration</b><br>EN 438 2 - 24                    |                             |                       |      |
| Apparence  | Tableau II e année          | ≥4                    |      |
| <b>• Modulo flexion</b><br>ISO 178                                       |                             |                       |      |
| Effort   | mpa                         | ≥9000                 |      |
| <b>• La résistance à la flexion</b><br>ISO 178                           |                             |                       |      |
| Effort   | mpa                         | ≥80                   |      |
| <b>• Indice d'oxygène</b><br>ISO 4589 - 2                                |                             |                       |      |
| Indice   | %                           | ≥30                   | ≥45  |