## Attribute Intensity Scale | Meaning
--- | ---
0 | Absent
1 | Just a trace and may not be found if tasted again
2 | Present in the sample but at low intensity
3 to 5 | Clearly characterizing the sample
6 to 8 | Dominant characterization of the sample
9 to 10 | Maximum. Strong intensity. Overpowers some other flavour notes in the sample

### NOTES on examples of origin typical of intensity level
- These examples are for illustrative purposes only and are not meant to be exclusive of any origins/types.
- Specific lots of individual origins can differ dramatically from these frequently encountered values.
- Currently available, widely traded and traditionally known origins and may be reviewed in future editions.

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Description</th>
<th>Intensity level</th>
<th>References notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocoa</td>
<td>Typical flavour of roasted cocoa beans that are well fermented, dried, free of defects.</td>
<td>0 – 2</td>
<td>Under-fermented cocoa, ancient Criollos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 – 5</td>
<td>Appropriately fermented “Nacional” and Papua New Guinean lots</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 – 8</td>
<td>Appropriately fermented cocoa, some West African and some Dominican Republic Hispaniolan lots</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 – 10</td>
<td>Some West African lots</td>
</tr>
<tr>
<td>Acidity</td>
<td><strong>Total acidity</strong> is the sum of the following individual acidities:</td>
<td>0 – 2</td>
<td>Some well-prepared West African lots</td>
</tr>
<tr>
<td></td>
<td>• <strong>Fruit:</strong> citric or other fruit acids</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Acetic:</strong> vinegar (can be smelled it in the sample)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Lactic:</strong> typically occurring in sour milk and yogurt</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Mineral and Butyric:</strong> harsh metallic tasting (mineral) and rancid butter (butyric)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perception of acidity intensity is particularly dependent on the amount of sample in the mouth.</td>
<td>3 – 5</td>
<td>Some Ecuadorian, Peruvian and Central American lots</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 – 8</td>
<td>Some Dominican Republic Hispaniolan, Papua New Guinean and Malaysian lots</td>
</tr>
<tr>
<td>Bitterness</td>
<td>Basic taste, typically perceived in caffeine, coffee, kola nut, some beers and grapefruit.</td>
<td>1 – 2</td>
<td>Some ancient Criollos</td>
</tr>
<tr>
<td></td>
<td>Perception of bitterness intensity is particularly dependent on the amount of sample in the mouth.</td>
<td>3 – 5</td>
<td>Well-prepared West African lots</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 – 8</td>
<td>Severely under- and un-fermented cocoa</td>
</tr>
</tbody>
</table>
### Astringency

Astringency could be perceived in two ways:
- **Sharp mouth-drying effect**, sharp, perceived between tongue and palate and/or at the back of the front teeth and inside lips and gums – typical of raw nut skins and green banana skins.
- **Velvety sensation** on the sides of mouth and tongue. Typical of tannins in some wines or beers.

Perception of astringency intensity is particularly dependent on the amount of sample in the mouth.

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<tr>
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<tr>
<td>1 – 2</td>
<td>Some ancient Criollos</td>
</tr>
<tr>
<td>3 – 5</td>
<td>Normal intensity for most cocoa</td>
</tr>
<tr>
<td>6 – 8</td>
<td>Typical of under-fermented cacao</td>
</tr>
<tr>
<td>9 – 10</td>
<td>Typical of appropriately fermented “Nacional”</td>
</tr>
</tbody>
</table>

### Fresh Fruit

Total Fresh Fruit is composed of the following sub-attributes:
- **Berry**: red or black currant, strawberry, raspberry, blackberry, acai berry
- **Citrus**: orange, lemon, lime, grapefruit or generic sensation of citrus-like fruit
- **Dark**: cherry, plum
- **Yellow / Orange / White flesh**: apricot, peach, pear, banana
- **Tropical**: passion fruit, pineapple, mango or soursop

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<tr>
<td>0 – 2</td>
<td>Many West African lots</td>
</tr>
<tr>
<td>3 – 5</td>
<td>Some Central and South American, well fermented Asia and Pacific country lots</td>
</tr>
<tr>
<td>6 – 7</td>
<td>Madagascar, some Central and South American country lots, some Papua New Guinean lots</td>
</tr>
</tbody>
</table>

### Browned Fruit

Total Browned Fruit is composed of the following sub-attributes:
- **Dried**: dried apricot, banana, yellow raisin, fig that has undergone an un sulphured drying process
- **Brown**: dark raisin, dates, prune
- **Over ripe**: No longer fresh and severely over-ripe fruit, turning brown inside and outside, as a step towards over-fermentation.

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<tr>
<td>0 – 2</td>
<td>Many West African lots</td>
</tr>
<tr>
<td>3 – 5</td>
<td>Fully fermented Indonesian and some Caribbean country lots</td>
</tr>
<tr>
<td>6 – 8</td>
<td>Some Papua New Guinean and some Caribbean country lots</td>
</tr>
</tbody>
</table>

### Floral

Total Floral is composed of the following sub-attributes:
- **Grassy / Green vegetal / Herbal**:
  - Grassy – freshly cut grass, young green leaves
  - Green vegetal – crushed mature leaves
  - Herbal – hay, straw or herbal / dried green, herbs like thyme and rosemary
- **Earthy / Mushroom / Moss / Woodsy**:
  - Earthy – smell of dampness rising from soil after rain
  - Mushroom – smell of fresh mushrooms
  - Moss – damp moss often associated with earthiness
  - Woodsy – leaves and wood on a forest floor
- **Orange blossom**: orange blossom flavour
- **Flowers**: jasmine, honeysuckle, rose, lilac, lilies, etc.

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<tr>
<td>0 – 2</td>
<td>West African lots</td>
</tr>
<tr>
<td>3 – 5</td>
<td>Appropriately fermented “Nacional” and some Caribbean country lots</td>
</tr>
<tr>
<td>6 – 8</td>
<td>Some Caribbean country lots and some Peruvian lots</td>
</tr>
<tr>
<td>Descriptor</td>
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</tr>
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<td>------------</td>
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</table>
| **Woody** | Total Woody is composed of the following sub-attributes:  
- Light wood: freshly cut cocoa wood, white pine wood, maple wood, ice-cream/popsicle wooden stick  
- Dark wood: oak, walnut, teak, mahogany  
- Resin: pitch of pine or other resinous wood | 0 – 2 | 3 – 5 Some “Nacional” and many West African lots |
| **Spice** | Total Spice is composed of the following sub-attributes:  
- Spices: dried coconut, nutmeg, cinnamon, cloves, liquorice, tonka, vanilla, black pepper  
- Tobacco: dried tobacco leaves  
- Savoury / Umami: sodium glutamate, umami | 0 – 2 | 3 – 5 In most origins In some West African, Central and South American and Caribbean country lots |
| **Nuttty** | Total Nutty is composed of the following sub-attributes:  
- Nut flesh: the edible kernel of a light roasted nut – hazelnut, macadamia, pecan, walnut, cashew, almond, brazil nut  
- Nut skins: the flavour of lightly roasted nut skins – hazelnut, macadamia, pecan, walnut, cashew, almond, brazil nut | 0 – 2 | 3 – 5 Some Central and South American and Caribbean countries’ lots and ancient Criollos |
| **Caramel/ Panela** | Aromas reminiscent of caramel, brown sugar and panela (unrefined cane sugar) | 0 – 2 | 3 – 5 Some Central and South American and Caribbean countries’ lots and ancient Criollos |
| **Sweetness (only for chocolate)** | Basic taste of white sugar solutions, typically perceived in foods like candies and desserts that contain sugar (or other sweeteners such as aspartame) also naturally found in other foods like fruits. | 0 – 2 | 3 – 5 |
| **Roast Degree** | A measure of the extent of the roasting the beans. Significant under or over roasting alters many of the attribute values. | 2 – 3 Low roast  
4 – 6 Medium Roast  
7 High roast  
8 – 10 Levels of burnt /over-roasted |
| **Off-Flavours** | Total Off-Flavours is composed of any unpleasant characters from the following:  
- Dirty / Dusty: not related to texture but to an off-flavour  
- Musty: stale, damp, mildew, decaying  
- Mouldy: characteristic of mould growth  
- Meaty / Animal / Leather:  
  - Meaty – cured meat, ham, rendered fat  
  - Animal – dirty animal / farmyard  
  - Leather – used old leather  
- Over-fermented / Rotten fruit: decomposing fruit  
- Putrid / Manure:  
  - Putrid – wet decomposing vegetative matter  
  - Manure – farmyard animal manure  
- Smoky: contamination from the smoke (any kind)  
- Other off-flavours: rancid, diesel, oil fumes, petroleum, tar, paint, tyres, chemicals, burnt, etc. | 0 | 1-2 Low intensity  
3+ Clearly characterizing the sample as a defect |
# Global Quality

The **Global Quality** score reflects the overall impression of:

- expressed flavour potential
- uniqueness of the sample
- balance of flavour and cleanliness of the finish

It celebrates the expression of genetics and terroir diversity through the farmer’s knowhow.

### Score | Meaning of Global Quality Scores
--- | ---
0 | Serious off-flavours clearly characterizing the sample as defective
1 | Core and complementary attributes masked by off-flavours
2 | Off-flavours in low intensity
3 | Core attributes seriously unbalanced
4 | Off-flavours in low intensity
5 | Core attributes unbalanced
6 | Off-flavours in low intensity
7 | One or more complementary attributes are outstanding but not in balance to core attributes
8 | Absence of any off-flavours
9 | Absence of any off-flavours
10 | Absence of any off-flavours

Global Quality scores and meaning below. For a Global Quality above 7, select positive qualities that best characterize the quality of the sample from the following list:

- Uniqueness
- Complexity
- Harmony / Balance
- Clear / Clean / Bright
- Quality of Acidity
- Quality of Astringency
- Quality of Bitterness
- Quality of Finish / Aftertaste