QUALITY REQUIREMENTS FOR TOMATOES

GENERAL CHARACTERISTICS
Tomato should be well mature, sound, firm texture with shiny and smooth surface and should have size and shape related to their varietal individuality. Selected tomatoes for processing purpose should not contain bruised marks, sunburn, any colored spots or and crevices on the surface. Tomato should also be free from growth cracks, cuts or any mechanical damage, insect infestation, disease and decay. Tomato should be harvested at mature or half ripe/turning color stage in-order to arrive at final destination safely.

QUALITY PARAMETERS FOR SELECTION OF SOUND TOMATOES
- Tomatoes should be
  - mature, sound, firm and fresh with glossy/smooth appearance
  - not be dry, soft, over ripped or punctured
  - clean and free from any foreign material, disorder, defects or contamination
  - pest free for the general appearance of produce
  - free from growth cracks, cuts, packaging, mechanical or pets damage
  - free from unusual moisture change except condensation after cold storage
  - free from black spots, sunburn, dry circular and bruised marks on surface
- Tomatoes should be harvested with stalk and calyx, which must be clean, fresh and free from all any foreign matter
- Tomato should be free from insect infestation, sunburn, freezing injury and disease (eg: blossom end rots)
- Every package of tomatoes should have uniform sized fruit and quality, and of same variety

COLOUR REQUIREMENTS

![Tomato Colour Requirements](image-url)
SIZE REQUIREMENTS

<table>
<thead>
<tr>
<th>Size Code</th>
<th>Diameter (mm) Minimum</th>
<th>Diameter (mm) Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30³</td>
<td>34</td>
</tr>
<tr>
<td>2</td>
<td>35⁴</td>
<td>39</td>
</tr>
<tr>
<td>3</td>
<td>40</td>
<td>46</td>
</tr>
<tr>
<td>4</td>
<td>47</td>
<td>56</td>
</tr>
<tr>
<td>5</td>
<td>57</td>
<td>66</td>
</tr>
<tr>
<td>6</td>
<td>67</td>
<td>81</td>
</tr>
<tr>
<td>7</td>
<td>82</td>
<td>101</td>
</tr>
<tr>
<td>8</td>
<td>102</td>
<td>over</td>
</tr>
</tbody>
</table>

Source: https://dmic.gov.in; Size codes are not applicable for cherry tomatoes; *minimum size requirement for "round and ribbed"; for "oblong" Size measured by equatorial section diameter (maximum).

VARIANTS

<table>
<thead>
<tr>
<th>Variants</th>
<th>SUPER (mm³)</th>
<th>GRADE A (mm³)</th>
<th>GRADE B (mm³)</th>
<th>GRADE C (mm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomato Hybrid</td>
<td>65-80</td>
<td>55-65</td>
<td>40-55</td>
<td>Any size</td>
</tr>
<tr>
<td>Tomato Local</td>
<td>56-70</td>
<td>41-55</td>
<td>30-40</td>
<td></td>
</tr>
<tr>
<td>Tomato Oval</td>
<td>N.A.</td>
<td>&gt; 41</td>
<td>30-40</td>
<td>&gt;41</td>
</tr>
<tr>
<td>Tomato Cherry</td>
<td>N.A.</td>
<td>20-30</td>
<td>31-40</td>
<td></td>
</tr>
</tbody>
</table>

³ Diameter; ⁴ Length; ⑤ Super grade will have the same quality parameters as for ‘Grade A’, except size. Source: http://sfacindia.com

TOMATO NOT RECOMMENDED FOR PURCHASE/PROCESSING

- Immature
- Rotten
- Punctured skin
- Watery patches
- Damaged
- Discolor Patches
- Patches with crack
- Dull pale look
- Shrivelled
- Punctured skin
- Sunburn
- Discoloration

For more information contact:

Director
ICAR-Central Institute of Post-Harvest Engineering & Technology, Ludhiana – 141 004, Punjab (India)
Phone: +91-161-2333205/2333122, FAX: +91-161-2338670
Email: director@ciphet.ac.in; Website: www.ciphet.in

Compiled & Edited by: Mridula D., Deepika Goswami, Akhoon Asrar, Indore Navnath, Rajpreet Kaur Goraya
Published under: CRP-SA Project on “Establishment of modern fruits and vegetables APCs”
© July 2019, ICAR-Central Institute of Post-Harvest Engineering & Technology, Ludhiana