

## Technical questionnaire

### Tomato

#### Version 15

*Mandatory fields or sections are marked with an asterisk (\*)*

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#### 01 . Botanical taxon: name of the genus, species or sub-species to which the variety belongs:

*Solanum lycopersicum* L.

*Solanum lycopersicum* L. × *Solanum pimpinellifolium* L.

Other species (please specify)

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#### 02 . Application code:

For office use only

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#### 03 . Breeder's reference:

Breeder's Ref.

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#### 04 . Information on the breeding scheme and propagation of the variety \*

##### 04 . 01 . Type of material \*

*(this question could be confidential)*

hybrid

cross-pollinated variety

self-pollinated variety

parent line

##### 04 . 02 . Method of propagation of the variety \*

*(this question could be confidential)*

seed propagated

vegetatively propagated

##### 04 . 03 . Other information on genetic origin and breeding method

*(this question could be confidential)*

Please specify

**05 . Characteristics**

(the number in brackets refers to the corresponding characteristic in the UPOV Technical Guidelines, please mark the state of expression which best corresponds).

**05 . 01 . Plant: growth type (2) (G) \***

1 - determinate	Campbell 1327, Prisca
2 - indeterminate	Marmande VR, Saint-Pierre, San Marzano 2

**05 . 01.01 . Only varieties with plant growth type indeterminate: Plant: height (6) \***

1 - very short	Cherry Belle
2 - very short to short	
3 - short	Carson, Despina
4 - short to medium	
5 - medium	Brooklyn, Buffalo, Vision
6 - medium to long	
7 - long	Classy, Clarence, Climberly, Massada
8 - long to very long	
9 - very long	Day Dream, Minired

**05 . 02 . Leaf: type of blade (10) (G) \***

1 - pinnate	Mikado, Pilot, Red Jacket
2 - bipinnate	Lukullus, Saint-Pierre

**05 . 02.01 . Leaf: intensity of green colour (12) \***

1 - very light	
2 - very light to light	
3 - light	Macero II, Poncette, Rossol
4 - light to medium	
5 - medium	Lucy
6 - medium to dark	
7 - dark	Allround, Daniela, Lorena, Red Robin
8 - dark to very dark	
9 - very dark	

**05 . 03 . Peduncle: abscission layer (19) (G) \***

1 - absent	Aledo, Bandera, Count, Lerica
9 - present	Montfavet H 63.5, Roma

**05 . 04 . Fruit: green shoulder (before maturity) (21) (G) \***

1 - absent	Felicia, Rio Grande, Trust
9 - present	Daniela, Montfavet H 63.5

**05 . 04.01 . Fruit: green stripes (before maturity) (25) (G) \***

1 - absent	Daniela
9 - present	Green Zebra, Tigerella

**05 . 05 . Fruit: size (26) (G) \***

1 - very small	Please indicate size in grams
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2 - very small to small	Please indicate size in grams
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3 - small	Please indicate size in grams
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4 - small to medium	Please indicate size in grams
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5 - medium	Please indicate size in grams
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6 - medium to large	Please indicate size in grams
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7 - large	Please indicate size in grams
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8 - large to very large	Please indicate size in grams
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9 - very large	Please indicate size in grams
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**05 . 06 . Fruit: shape in longitudinal section (28) (G) \***

1 - flattened	Campbell 28, Marmande VR
2 - oblate	Montfavet H 63.4, Montfavet H 63.5
3 - circular	Cerise, Moneymaker
4 - oblong	Early Mech, Peto Gro
5 - cylindrical	Hypeel 244, Macero II, San Marzano 2
6 - elliptic	Alcaria, Castone
7 - cordate	Valenciano
8 - ovate	Dualrow, Soto
9 - obovate	Duquesta, Estelle Rimone, Rio Grande
10 - pyriform	Europeel
11 - obcordate	Cuore del Ponente, Magno

**05 . 06.01 . Fruit: ribbing at peduncle end (29) \***

1 - absent or very weak	Calimero, Cerise
2 - very weak to weak	
3 - weak	Early Mech, Hypeel 244, Melody, Peto Gro, Rio Grande
4 - weak to medium	
5 - medium	Montfavet H 63.4, Montfavet H 63.5
6 - medium to strong	
7 - strong	Campbell 1327, Carmello, Count
8 - strong to very strong	
9 - very strong	Costoluto Fiorentino, Ingrid, Marmande VR

**05 . 07 . Fruit: number of locules (36) (G) \***

1 - only two	Early Mech, Europeel, San Marzano
2 - two or three	Alphamech, Futuria
3 - three or four	Montfavet H 63.5
4 - four, five or six	Raïssa, Tradiro
5 - more than six	Marmande VR

**05 . 07.01 . Do fruits of the variety reach maturity? \***

Yes

No

**05 . 07.02 . LSL genes \***

- 1 - absent
- 9 - present

**05 . 07.03 . If LSL Genes present**

1 - NOR gene homozygous

2 - NOR gene heterozygous

3 - RIN gene homozygous

4 - RIN gene heterozygous

5 - other gene

Please specify

**05 . 07.04 . Fruit: gel in locules \***

1 - absent

9 - present

**05 . 08 . Fruit: colour at maturity (37) \***

1 - cream

Jazon, White Mirabell

2 - yellow

Goldene Königin, Yellow Pear

3 - orange

Sungold

4 - pink

Aichi First

5 - red

Dianela, Ferline, Montfavet H 63.5

6 - brown

Ozyrys

7 - green

Green Grape, Green Zebra

**05 . 08.01 . Fruit: firmness (40) \***

1 - very soft

Marmande VR

2 - very soft to soft

3 - soft

Trend

4 - soft to medium

5 - medium

Cristina

6 - medium to firm

7 - firm

Fernova, Konsul, Tradiro

8 - firm to very firm

9 - very firm

Dianela, Karat, Lolek

**05 . 08.02 . Time of maturity (42) \***

1 - very early	Dolcevita, Sungold, Sweet Baby
2 - very early to early	
3 - early	Bianca, Rossol, Shiren
4 - early to medium	
5 - medium	Gourmet, UC 82B
6 - medium to late	
7 - late	Arletta, Durinta
8 - late to very late	
9 - very late	Dianela

**05 . 09 . Resistance to *Meloidogyne incognita* (Mi) (43) (G) \***

1 - susceptible	Casaque Rouge
2 - moderately resistant	Campeon, Tynic
3 - highly resistant	Anahu x Casaque Rouge

**05 . 10 . Resistance to *Verticillium* sp. (Va and Vd) - Race 0 (44) (G) \***

1 - absent	Anabel, Marmande verte
9 - present	Daniela, Marmande VR

**05 . 11 . Resistance to *Fusarium oxysporum* f. sp. *lycopersici* (Fol) - Race 0EU/1US (45.1) (G) \***

1 - absent	Marmande, Marmande verte, Resal
9 - present	Gourmet, Larissa, Marporum, "Marporum x Marmande verte", Mohawk, Motelle, Riesling

**05 . 12 . Resistance to *Fusarium oxysporum* f. sp. *lycopersici* (Fol) - Race 1EU/2US (45.2) (G) \***

1 - absent	Cherry Belle, Marmande verte, Marporum, Ranco, Roma
9 - present	Agostino, "Motelle x Marmande verte", Odisea, Tradiro

**05 . 13 . Resistance to *Tomato mosaic virus* (ToMV) - Strain 0 (48.1) (G) \***

1 - absent	Monalbo, Moneymaker
9 - present	Mobaci, Mocimor, Momor, Moperou

**06 . Similar varieties and differences from these varieties**

Please note that information on similar varieties may help to identify comparable varieties and can avoid an additional period of testing.

**06 . 01 . Are there any similar varieties known? \***

Yes

No

**06 . 02 . Similar varieties and differences from these varieties: \***

Denomination(s) of variety(ies) similar to your candidate variety	Characteristic(s) in which your candidate variety differs from the similar variety(ies)	Describe the expression of the characteristic(s) for the similar variety(ies)	Describe the expression of the characteristic(s) for your candidate variety

**07 . Additional information which may help to distinguish the variety \***

**07 . 01 . In addition to the information provided in sections 5 and 6, are there any additional characteristics which may help to distinguish the variety? \***

Yes, specify

No

**07 . 02 . Are there any special conditions for growing the variety or conducting the examination? \*****07 . 02.01 . Type of culture \***

in the greenhouse

in the open field

**07 . 02.02 . Details of type of culture \***

staked

semi-staked

non-staked

**07 . 02.03 . Main use \***

fresh market or garden

industrial processing (indicate type)

pot plant

rootstock

**07 . 02.03.01 . Details of fresh market/industry**

single

truss

other

Please specify

**07 . 02.03.02 . Details of industry**

peel

paste

other

Please specify

**07 . 02.04 . Are there any special conditions for growing the variety or conducting the examination? \***

Yes

No

**07 . 03 . Other information**

**07 . 03.01 . Resistances to pests and diseases (please specify races/strains if possible) \***

The examination offices test the resistances based on the resistance test protocols listed in the CPVO-TP in force. In case the applicant does assess the resistance based on a different protocol than the one mentioned in the CPVO-TP, please be aware that this could lead to discrepancies between your declaration and the results obtained by the examination office. This may also have important consequences on the conduct of the DUS testing as well as trigger additional tests and fees. In addition, for some resistances an alternative DNA marker test exists. As the phenotype is always leading, the declaration in this Technical Questionnaire should not be based on such DNA marker test only.

**07 . 03.01.01 . Resistance to *Fusarium oxysporum* f. sp. *lycopersici* (Fol) - Race 2EU/3US (45.3) \***

absent

present

not tested

**07 . 03.01.02 . Indeterminate types: Resistance to *Fusarium oxysporum* f. sp. *radicis-lycopersici* (Forl) (46) \***

absent

present

**07 . 03.01.03 . Resistance to *Passolora fulva* Race 0 (47.1) \***

absent

present

not tested

**07 . 03.01.04 . Determinate types: Resistance to *Passolora fulva* Group A (47.2) \***

absent

present

not tested

**07 . 03.01.04 . Indeterminate types: Resistance to *Passolora fulva* Group A (47.2) \***

absent

present

**07 . 03.01.05 . Determinate types: Resistance to *Passolora fulva* Group B (47.3) \***

absent

present

not tested

**07 . 03.01.05 . Indeterminate types: Resistance to *Passolora fulva* Group B (47.3) \***

absent

present

**07 . 03.01.06 . Determinate types: Resistance to *Passolora fulva* Group C (47.4) \***

absent  
present  
not tested

**07 . 03.01.06 . Indeterminate types: Resistance to *Passolora fulva* Group C (47.4) \***

absent  
present

**07 . 03.01.07 . Determinate types: Resistance to *Passolora fulva* Group D (47.5) \***

absent  
present  
not tested

**07 . 03.01.07 . Indeterminate types: Resistance to *Passolora fulva* Group D (47.5) \***

absent  
present

**07 . 03.01.08 . Determinate types: Resistance to *Passolora fulva* Group E (47.6) \***

absent  
present  
not tested

**07 . 03.01.08 . Indeterminate types: Resistance to *Passolora fulva* Group E (47.6) \***

absent  
present

**07 . 03.01.09 . Resistance to *Tomato mosaic virus* (ToMV) strain 1 (48.2) \***

absent  
present  
not tested

**07 . 03.01.10 . Resistance to *Tomato mosaic virus* (ToMV) strain 2 (48.3) \***

absent  
present  
not tested

**07 . 03.01.11 . Resistance to *Phytophthora infestans* (PI) (49) \***

absent  
present  
not tested

**07 . 03.01.12 . Resistance to *Pyrenochaeta lycopersici* (PI) (50) \***

absent  
present  
not tested

**07 . 03.01.13 . Resistance to *Stemphylium* spp. (Ss) (51) \***

absent  
present  
not tested

**07 . 03.01.14 . Determinate types: Resistance to *Pseudomonas syringae* pv. *tomato* (Pst) (52) \***

absent  
present

**07 . 03.01.14 . Indeterminate types: Resistance to *Pseudomonas syringae* pv. *tomato* (Pst) (52) \***

absent  
present  
not tested

**07 . 03.01.15 . Resistance to *Ralstonia solanacearum* race 1 (Rs) (53) \***

absent  
present  
not tested

**07 . 03.01.16 . Resistance to *Tomato yellow leaf curl virus* (TYLCV) (54) \***

absent  
present  
not tested

**07 . 03.01.17 . Resistance to *Tomato spotted wilt virus* (TSWV) - Strain 0 (55) (G) \***

absent  
present

**07 . 03.01.18 . Resistance to *Leveillula taurica* (Lt) (56) \***

absent  
present  
not tested

**07 . 03.01.19 . Resistance to *Oidium neolycopersici* (On) (ex *Oidium lycopersicum* (Ol)) (57) \***

absent  
present  
not tested

**07 . 03.01.20 . Resistance to *Tomato torrado virus* (ToTV) (58) \***

absent  
present  
not tested

**07 . 03.01.21 . Other resistances**

Please specify

**07 . 03.02 . Other information \***

Yes, specify

No

**07 . 04 . Photo**

It is highly recommended to provide pictures (especially fruits at maturity). Otherwise, the organisation of the technical examination will be rendered less efficient, with the risk of an additional year of technical examination at the costs of the applicant.

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**08 . GMO-information \***

**08 . 01 . GMO-information required \***

The variety represents a Genetically Modified Organism within the meaning of Article 2(2) of Council Directive EC/2001/18 of 12/03/2001.

Yes

If yes, please attach in point 08.02 a copy of the written attestation of the responsible authorities stating that a technical examination of the variety under Articles 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.

No

**08 . 02 . In case of GMO, joint attestation of the responsible authorities stating that a technical examination of the variety under Articles 55 and 56 of the Basic Regulation does not pose risks to the environment according to the norms of the above-mentioned Directive.**

**DECLARATIONS \***

I/we hereby declare that to the best of my/our knowledge the information given in this form is complete and correct.

Place

Date

Name

Signature