

Technical questionnaire

tomato

Version 18

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

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)

02 . Application code:

For office use only

03 . Breeder's reference

Breeder's Ref.

04 . Information on the breeding scheme and propagation of the variety

04 . 01 . Type of material *

hybrid

cross-pollinated variety

self-pollinated variety

parental line

04 . 01.01 . Parental line use

(this question could be confidential)

In many cases there is a link in morphological expression of characteristics between the parental line and its hybrids. Therefore, it is recommended to provide information about the identity of hybrid varieties where the parental line is used. This makes the organisation of the technical examination more efficient and lowers the risk of an additional year at the costs of the applicant. This information will only be shared with the examination office in charge of the technical examination.
In accordance with Article 88(3) of Regulation 2100/1994 the Office will treat the information under this section as confidential on request of the applicant.

Please indicate for the production of which hybrid variety(ies) the parental line is used

04 . 02 . Method of propagation of the variety *

seed propagated

vegetatively propagated

Please specify

04 . 03. . Should the following question on genetic origin and breeding method be treated as confidential? *

Yes

No

04 . 04 . Confidentiality justification **(this question could be confidential)*

Please explain why the information is to be considered as confidential and how its disclosure would harm your commercial interests (included but not limited to business relations, manufacturing secrets, expertise, commercial strategies, intellectual property) under Article 4(2) of Regulation 1049/2001. Since the general rule is transparency, it is in your best interest to provide strong reasons to support your request for confidentiality. If a public access request is received, the Office will evaluate your justifications and decide whether to disclose or not the information.

Please provide detailed explanations *

04 . 05 . Information on the breeding method and the genetic origin of the application*(this question could be confidential)*

breeding method

parentage with any other varieties

05 . Characteristics of the variety to be indicated

(the number in brackets refers to the corresponding characteristic in the CPVO Technical Protocol; please mark the state of expression which best corresponds)

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.

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

1 - determinate

Rio Grande, Siluet

2 - indeterminate

Daniela, Florenteen, Marmande VR, Saint-Pierre

05 . 02 . Only varieties with plant growth type indeterminate: Plant: height (6) *

1 - very short	Gardener's Delight, Maresme, Zadenna
2 - very short to short	
3 - short	Delfine, Despina
4 - short to medium	
5 - medium	Brooklyn, Campari
6 - medium to tall	
7 - tall	Climberley, Pitenza
8 - tall to very tall	
9 - very tall	Goldwin, Romindo

05 . 03 . Leaf: type (10) (G) *

1 - pinnate	Matina
2 - bipinnate	Daniela, Saint-Pierre

05 . 04 . Leaf: intensity of green colour (12) *

1 - very light	
2 - very light to light	
3 - light	Rossol
4 - light to medium	
5 - medium	Rebelski
6 - medium to dark	
7 - dark	Daniela, Red Robin
8 - dark to very dark	
9 - very dark	

05 . 05 . Peduncle: abscission layer (18) (G) *

1 - absent	Merlice, Rio Grande
9 - present	Daniela, Grownnet, Montfavet 63-5

05 . 06 . Immature fruit: green shoulder (20) (G) *

1 - absent	Geronimo
9 - present	Daniela, Montfavet 63.5

05 . 07 . Immature fruit: green stripes (24) (G) *

1 - absent	Daniela, Guanche, Jasminia
9 - present	Green Zebra, Tigerella

05 . 08 . Immature fruit: anthocyanin coloration (25) (G) *

1 - absent	Durinta
9 - present	HN5003

05 . 09 . Fruit: size (26) (G) *

1 - very small	Cerise, Sweet 100Please indicate size in grams:
2 - very small to small	Dolcetini, Genio Please indicate size in grams:
3 - small	Brioso, Tankini Please indicate size in grams:
4 - small to medium	Larimar, Progress Please indicate size in grams:
5 - medium	Mezcal, Oceano Please indicate size in grams:
6 - medium to large	Luminance, Rio Grande Please indicate size in grams:
7 - large	Carmello, Floradade Please indicate size in grams:
8 - large to very large	Florenteen, Grownet Please indicate size in grams:
9 - very large	Cupidissimo, Marsilia Please indicate size in grams:

05 . 10 . Fruit: shape in longitudinal section (28) (G) *

1 - flattened	Margold, Marmande VR
2 - oblate	Cartesio, Gloriette, Merlice, Montfavet 63-5
3 - circular	Cerise, Soussia
4 - oblong	Landolino, Red Sky
5 - cylindric	Hypeel 244, Sir Elyan
6 - elliptic	Obock
7 - cordate	Cuor di Bue, Cupidissimo, Laureen, Valenciano
8 - ovate	Dualrow, Soto
9 - obovate	Duquesa, Estelle, Mezcal
10 - pyriform	Oceano, Olivenza, Operino
11 - obcordate	Cuore del Ponente, Ingrid

05 . 11 . Fruit: ribbing (29) *

1 - absent or very weak	Cerise, Conchita
2 - very weak to weak	
3 - weak	Baikonur, Guanche
4 - weak to medium	
5 - medium	Montfavet 63-5, Shourouq
6 - medium to strong	
7 - strong	Marmanlido, Marmande VR, Marsilia
8 - strong to very strong	
9 - very strong	Ingrid, Marsalato

05 . 12 . Fruit: number of locules (36) (G) *

1 - only two	Creativo, San Marzano 2, Tropical
2 - two and three	Bomfado, Orinade
3 - three and four	Durinta, Montfavet 63-5
4 - four, five or six	Rovente, Tosmar, Tradiro
5 - more than six	Bronson, Chocostar, Marmande VR

05 . 13 . Fruit: gel in locules (37) (G) *

1 - absent	Allfresh 1120, Nun 03560
9 - present	Daniela, Rio Grande

05 . 14 . Do fruits of the variety reach maturity? *

Yes

No

05 . 15 . LSL genes *

1 - absent

9 - present

05 . 16 . 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 . 17 . Fruit: colour (38) (G) *

1 - yellowish white	Cream Sausage
2 - yellow	Babylor, Mimosa
3 - orange	Operino, Oranjestar
4 - pink	Framboo, Pink Wand, Tomimaru Muchoo
5 - red	Daniela, Ferline, Montfavet 63-5, Saint-Pierre, Umaca
6 - brown	Chocostar, Marbruni
7 - green	Green Grape, Green Zebra

05 . 18 . Fruit: firmness (42) *

1 - very soft	Marmande VR
2 - very soft to soft	
3 - soft	Marinda, Marsalato
4 - soft to medium	
5 - medium	Rosannita, Sunita
6 - medium to firm	
7 - firm	Losna, Octavio, Tradiro
8 - firm to very firm	
9 - very firm	Brito, Daniela, Larimar, Lolek

05 . 19 . Time of maturity (44) *

1 - very early	Goldwin, Pyremello, Sweet Baby, Trambellino
2 - very early to early	Delisher
3 - early	Lemonade, Shiren, Zorayda
4 - early to medium	
5 - medium	Delizia, Losna, Sonico
6 - medium to late	
7 - late	Mariana, Saneh
8 - late to very late	
9 - very late	Atago, Brito, Daniela, Raymos, Wafira

05 . 20 . Resistance to *Meloidogyne incognita* (Mi) (45) (G) *

1 - absent or low	Casaque Rouge
2 - medium	Campeon, Tyonic
3 - high	Anahu, Anahu x Casaque Rouge

05 . 21 . Resistance to *Verticillium* sp. (Va and Vd) - Race 0 (46) (G) *

1 - absent	Marmande verte, Moneymaker
9 - present	Marmande VR, Monalbo

05 . 22 . Resistance to *Fusarium oxysporum* f. sp. *lycopersici* - Race 0EU/1US (Fol: 0EU/1US) (47) (G) *

1 - absent	Marmande verte, Moneymaker
9 - present	Anabel, Marporum, Marsol

05 . 23 . Resistance to *Fusarium oxysporum* f. sp. *lycopersici* - Race 1EU/2US (Fol: 1EU/2US) (48) (G) *

1 - absent	Marmande verte, Moneymaker
9 - present	Motelle

05 . 24 . Resistance to *Fusarium oxysporum* f. sp. *lycopersici* - Race 2EU/3US (Fol: 2EU/3US) (49) *

1 - absent	Marmande verte, Motelle
9 - present	Alliance, Ivanhoé
not tested	

05 . 25.01 . Resistance to *Fusarium oxysporum* f. sp. *radicis-lycopersici* (For) - determinate types (50) *

1 - absent	Marmande verte, Moneymaker
9 - present	Momor
not tested	

05 . 25.02 . Resistance to *Fusarium oxysporum* f. sp. *radicis-lycopersici* (For) - indeterminate types (50) *

1 - absent	Moneymaker, Motelle
9 - present	Momor

05 . 26 . Resistance to *Passalora fulva* (Pf) - Race 0 (51) *

1 - absent	Monalbo, Moneymaker
9 - present	Antique, Pink Treat, Retinto, Sprigel, Triatlon
not tested	

05 . 27 . Resistance to *Passalora fulva* (Pf) - Race A (52) *

1 - absent	Monalbo, Moneymaker, Retinto
9 - present	Antique, Pink Treat, Sprigel, Triatlon
not tested	

05 . 28 . Resistance to *Passalora fulva* (Pf) - Race B (53) *

1 - absent	Monalbo, Moneymaker, Pink Treat
9 - present	Antique, Retinto, Sprigel, Triatlon
not tested	

05 . 29 . Resistance to *Passalora fulva* (Pf) - Race C (54) *

1 - absent	Monalbo, Moneymaker, Pink Treat, Retinto
9 - present	Antique, Sprigel, Triatlon
not tested	

05 . 30 . Resistance to *Passalora fulva* (Pf) - Race D (55) *

1 - absent	Monalbo, Moneymaker, Triatlon
9 - present	Antique, Pink Treat, Retinto, Sprigel
not tested	

05 . 31.01 . Resistance to *Passalora fulva* (Pf) - Race E - determinate types (56) *

1 - absent	Monalbo, Moneymaker
9 - present	Antique, Sprigel
not tested	

05 . 31.02 . Resistance to *Passalora fulva* (Pf) - Race E - indeterminate types (56) *

1 - absent	Monalbo, Moneymaker
9 - present	Antique, Sprigel

05 . 32 . Resistance to *Passalora fulva* (Pf) - Race F (57) *

1 - absent	Monalbo, Moneymaker
9 - present	Chelino, Completo
not tested	

05 . 33 . Resistance to *Passalora fulva* (Pf) - Race H (58) *

1 - absent	Sprigel
9 - present	Chelino, Completo
not tested	

05 . 34 . Resistance to *Passalora fulva* (Pf) - Race J (59) *

1 - absent	Chelino, Completo
9 - present	Mogami
not tested	

05 . 35 . Resistance to Tomato mosaic virus - Strain 0 (ToMV: 0) (60) (G) *

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

05 . 36 . Resistance to Tomato mosaic virus - Strain 1 (ToMV: 1) (61) *

1 - absent	Mobaci, Monalbo, Moneymaker
9 - present	Mocimor, Momor, Moperou
not tested	

05 . 37 . Resistance to Tomato mosaic virus - Strain2 (ToMV: 2) (62) *

1 - absent	Monalbo, Moneymaker, Moperou
9 - present	Mobaci, Mocimor, Momor
not tested	

05 . 38 . Resistance to *Phytophthora infestans* (Pi) (63) *

1 - absent	Moneymaker, Saint Pierre
9 - present	Phantasia, Sixtina
not tested	

05 . 39 . Resistance to *Pseudopyrenochaeta lycopersici* (ex *Pyrenochaeta lycopersici*) (PI) (64) *

1 - absent	Marmande verte
9 - present	Garance
not tested	

05 . 40 . Resistance to *Stemphylium* spp. (Ss) (65) *

1 - absent	Monalbo
9 - present	Motelle
not tested	

05 . 41.01 . Resistance to *Pseudomonas syringae* pv. *tomato* (Pst) - determinate types (66) *

1 - absent	Monalbo, Moneymaker
9 - present	Fuzzer

05 . 41.02 . Resistance to *Pseudomonas syringae* pv. *tomato* (Pst) - indeterminate types (66) *

1 - absent	Monalbo, Moneymaker
9 - present	Fuzzer
not tested	

05 . 42 . Resistance to *Ralstonia solanacearum* - Race 1 (Rs: 1) (67) *

1 - absent	Floradel
9 - present	Caraïbo
not tested	

05 . 43 . Resistance to Tomato yellow leaf curl virus (TYLCV) (68) *

1 - absent	Marmande, Moneymaker
9 - present	Delyca, Montenegro
not tested	

05 . 44 . Resistance to Tomato spotted wilt virus - Pathotype 0 (TSWV: 0) (69) (G) *

1 - absent	Moneymaker, Montfavet 63.5, Mountain Magic
9 - present	Bodar, Mospomor

05 . 45 . Resistance to *Leveillula taurica* (Lt) (70) *

1 - absent	Montfavet 63.5
9 - present	Radiance
not tested	

05 . 46 . Resistance to *Pseudoidium neolycopersici* (ex *Oidium neolycopersici*) (Pn) (ex On) (71) *

1 - absent	Montfavet 63.5
9 - present	Romiro
not tested	

05 . 47 . Resistance to Tomato torrado virus (ToTV) (72) *

1 - absent	Daniela
9 - present	Matias
not tested	

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 main use

single

truss

other

Please specify

07 . 02.03.02 . Details of main use

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 . Resistance to pests and diseases *

Yes, specify

No

07 . 03.02 . Other information *

Yes, specify

No

07 . 04 . Photo

It is highly recommended to provide pictures (up to five). 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. Full guidance on the picture quality can be found [here](#)

07 . 04.01 . Details of the photo(s)

Place and conditions under which the material shown in the photo was grown (e.g. plants grown in the greenhouse vs. grown in the open field)

Date of the photo(s) (month and year)

07 . 04.02 . Attached photo(s)

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.

09 . Information on plant material to be examined

The expression of a characteristic or several characteristics of a variety may be affected by factors, such as pests and disease, chemical treatment (e.g. growth retardants or pesticides), effects of tissue culture, different rootstocks, scions taken from different growth phases of a tree, etc. Consequently the plant material to be examined should not have undergone any treatment which would affect the expression of the characteristics of the variety, unless the competent authorities allow or request such treatment. If the plant material has undergone such treatment, full details of the treatment must be given. In this respect, please indicate below, to the best of your knowledge, if the plant material to be examined has been subjected to:

09 . 01 . Micro-organisms (e.g. virus, bacteria, phytoplasma) *

Yes, specify

No

09 . 02 . Chemical treatment (e.g. growth retardant or pesticide) *

Yes, specify

No

09 . 03 . Other factors *

Yes, specify

No

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