Steriltom S.r.l.	**PRODUCT SPECIFICATION** **CRUSHED TOMATOES Code 10-6.0**
	Size: 10X10 mm - °Bx: 6.0° minimum

Rev	Date	Revision description	Drawn up by	Checked by	Approved by
000	02/05/05	First version	Quality Manager	Production Manager	Management
001	30/08/10	Pathogen tests addition	Quality Manager	Production Manager	Management
002	24/05/12	Addition of nutritional values, allergens and ingredients origin	Quality Manager	Production Manager	Management
003	01/07/15	Modification of stability parameters; production batch coding, Addition of claim managing and special dietary requirements	Quality Manager	Production Manager	Management
004	1/07/2017	Modification of allergens paragraph	Quality Manager	Production Manager	Management
005	21/07/2018	Shelf-life extension for bags size mini and batch code updating	Quality Manager	Production Manager	Management
006	01/07/2019	Updating origin citric acid	Quality Manager	Production Manager	Management

1 – DEFINITION

Tomato pulp, obtained from tomatoes that are selected, peeled, extruded and mixed with juice, upon discarding any foreign body.

2 – INGREDIENTS and ORIGIN

2.1 - Tomatoes:	around 70 % (origin: Italy)
2.2 – Tomato juice:	around 30 % (origin: Italy)
2.3 – Acidity regulator, citric acid:	quantum satis, according to good manufacturing practice, max 0,20% (origin: EU)

In compliance with regulations CE no. 1829 and 1830 of 2003, tomato pulp does not contain GMOs, and it is not made from or does not have ingredients made from GMOs.

3 – PROCESSING

After the raw material quality check, the tomatoes are washed in water, and then electronically sorted.

The tomatoes are then steamed (around 100°C) and crushed.

The tomato pulp obtained is then partially drained and mixed with evaporated tomato juice in order to increase its °Bx, its density and smoothness.

At this stage the product can be put through three different procedures of production:

1. Production in aseptic bags;
2. Production in bags through hot filling;
3. Production in tinplate cans.

The first method consists in sterilizing the pulp (through heating, holding and cooling) and then filling aseptic bags of various sizes.

The second method is different from the first as it does not include the cooling after the holding stage; bags are hot filled and then cooled in water towers.

The third method consists in pre-sterilizing the pulp through the heating and holding phases, filling the tinplate cans and then pasteurizing them.

4 - FINISHED PRODUCT PARAMETERS

4.1 – Organoleptic properties

Appearance: Tomato pulp in discernible pieces, with a good consistency, and basically free from any kind of foreign material.

Colour: Bright red, the typical colour of sound tomatoes that are picked with the right degree of ripeness.

Smell and taste: Fresh and typical, without unusual odours or taste.

4.2 – Physical properties

Parameters Description	M.U.	Range	Analysis method
Initial dimentions of dices	mm	**10X10**	Visual inspection
Depigmented pieces	N°/100 g	< 10	Visual inspection
Rot and necrosis	%	Absents	Visual inspection
Residual skins	cm^2/100 g	< 12,50	Visual inspection
Stalks' weight	%	< 0,05	Visual inspection
Non vegetable material	%	Absent	Visual inspection

4.3 –Chemical properties

Parameters Description	M.U.	Range	Analysis method
°Brix (20°C on wet weight basis)	%	**> 6,00**	Refractometric
pH (20 °C on wet weight basis)		< 4,40	Potentiometric
Total acidity (% citric acid on wet weight basis) / Dry residue	%	< 9,50	Titration with phenolphthalein
Drained weight		>60,00	Sieve, 2'
Pesticides and heavy metals		In compliance with law in force	HPLC

4.4 –Bacteriological properties

Parameters Description	*M.U.*	*Range*	*Analysis method*
Beta-glucuronidase-positive Escherichia coli	**CFU/g**	**<10**	**ISO 16649-2:2001**
Clostridium perfrigens	**CFU/g**	**<10**	**UNI EN ISO 7937:2005**
Coagulase positive staphylococci at 37°C (Staphylococcus aureus and other species)	**CFU/g**	**<10**	**UNI EN ISO 6888-2:2004**
Listeria monocytogenes	**CFU/25 g**	**Absent**	**AFNOR BIO 12/11 - 03/04**
Salmonella	**CFU/25 g**	**Absent**	**AFNOR BIO 12/16 - 09/05**
Yeasts and Moulds*	**CFU/g**	**<10**	**MA M-AL-STAB rev.1 2013**
Lactic bacteria	**CFU/g**	**Absent**	**MA M-AL-STAB rev.1 2013**
Total bacterial Count (Mesophilic aerobic*)	**CFU/g**	**<100**	**MA M-AL-STAB rev.1 2013**

*** Only for bags.**

Aseptic bags and hot-filling bags: stable after 14 days incubation at 30°C.

Cans: stable after 7 days incubation at 55°C.

Product subjected to pasteurization or sterilization heat treatment suitable for low acid canned foods, able to maintain commercial stability until the expiration date, in undamaged packaging kept at room temperature in cool, dry and clean place.

5 – SHELF LIFE

Drums and big-bags: 24 months from production date;

Aseptic bags and hot-filling bags (mini): 36 months from production date;
Cans: 36 months end year production date.

6 - PRODUCTION BATCH CODING

Drums and big bags:
Each container is specifically marked with a label with the following information:
Name and/or code of producer, product and ingredients' description, net weight, production batch and date, line of production and filling head, Best Before End, condition of use, SSCC code.
Example of BBE: 20/08/18 = Best Before End dd/mm/yy (Bags expiry date, 24 months from production date)

Small size aseptic bags and hot-filling bags:
An ink-jet spray printer marks each bag as follows:

L6 A PLP Prod. Date: 20/08/2018
17:30 KK1 BBE 20/08/2021

Cans:
An ink-jet spray printer marks each can as follows:
PLP-KK1-17:30-20/08/2018-BBE 31/12/2021

Where
L6 = Line of production n° 6
A = Filling head (if present)
PLP = Kind of product (eg. tomato pulp)
Prod. Date: 20/08/2018 = Production date dd/mm/yyyy
17:30 = Production hour hh;mm
KK1 = Producer's code (of Steriltom S.r.l.)
BBE 20/08/2021 = Best Before End dd/mm/yyyy (Bags expiry date, 36 months from production date)
BBE 31/12/2021 = Best Before End dd/mm/yyyy (Cans expiry date, 36 months end year production date)

7 - PRIMARY PACKAGE

Aseptic and hot-filling process: various size bags, made of a compound of aluminum and plastic suitable for alimentary use.
Technical features: available on request.
Cans process: tinplate container with lid, suitable for alimentary use.
Technical features: available on request.

8 – STORAGE

Small size aseptic bags and hot-filling bags and cans: at ambient temperature, in cool, indoor clean and dry places.
Big size aseptic bags (drums and big bags): at ambient temperature.

9 – NET WEIGHT

Big bags: 850 Kg
Drums: 205 or 210 Kg
Aseptic bags: 10 or 15 Kg
Hot-filling bags: 1, 3, 5 or 10 kg
Cans: 2,5 Kg (can volume 2650 ml), 4,05 Kg (can volume 4250 ml).

10 – CLAIMS

Each claim must be forwarded by mail to: qualita@steriltom.com and/or ufficioqualita@steriltom.com.
Due to the flex-cracking problem, it is recommended to use the product within 30 days from its arrival.
Steriltom does not respond of damages caused by flex-cracking after 90 days from the delivery date. In case of claim forwarded beyond 90 days from the products delivery date, the customer must supply suitable papers/records proving that the lack of conformity was existing at the delivery moment.
In order to carry out correct management and analysis of the claim, the compulsory and minimum data that must be forwarded are followings : invoice number and/or documentary evidence of transportation (bill of entry) and/or SSCC code printed on the pallet label and/or TMC-BBE code printed with inkjet on the carton and/or inkjet labelling completed with batch number and production hour present on white latten cans and on bags.

11 – NUTRITIONAL VALUES

Nutritional values for 100 g	
Energetic value	29 Kcal - 121 KJ
Fat	0,14 g
Of which saturates	0,02 g
Carbohydrate	5,87 g
Of which sugars	5,07 g
Fibre	0,80 g
Protein	1,49 g
Salt	0,12 g

12 – ALLERGENS

We reasonably suppose there is no risk of unintended cross contamination about:

1. Gluten-based grains (namely: wheat, rye, barley, oats, spelt, kamut, or their hybrid strains) and derived products.

2. Shellfish and shellfish products (crustaceans and molluscs).

3. Eggs and egg-based products.

4.Fish and fish products.

5. Peanuts and peanut-based products.

6. Soy and soy-based products.

7. Milk and dairy products (including lactose).

8. Nuts, namely: almonds (Amygdalus communis L.), hazelnuts (Corylus avellana), walnuts (Juglans regia), cashew nuts (Anacardium occidentale), pecan nuts (Carya illinoiesis (Wangenh.) K. Koch), Brazilian nuts (Bertholletia excelsa), pistachio nuts (Pistacia vera), macadamia nuts (Macadamia ternifolia) and derived products.

9. Celery and celery-based products.

10. Mustard and mustard-based products.

11. Sesame seeds and sesame seed- based products.

12. Sulphur dioxide e sulphites higher than 10 mg/kg or 10 mg/l referred to as SO_2.

13. Lupins and lupin-based products.

14. Molluscs and products thereof.

13 - SPECIAL DIETARY REQUIREMENTS

Product without use restriction, suitable for coeliacs, vegetarians, ovo-lacto-vegetarian, ovovegetarian, lacto-vegetarian, vegans.
Suitable for Halal and Kosher diet.

Date	Customer	Name and position	Signature and Stamp of Approval