

## Table Olive Testing

### 1.0 The Voluntary Standard for Table Olives in Australia

Signatories to the AOA *Code of Practice for olive oil, table olives and other olive products*, are required to undertake specified physical, chemical, microbiological and organoleptic testing of a sample taken from each batch identified on table olive product labels to establish eligibility to apply the new *Certified Australian Table Olives™* Certification Trademark, in accordance with *The Voluntary Industry Standard for Table Olives in Australia (RIRDC 2012)*<sup>1</sup>:

- Ref Section 3, Table 2: Physico-chemical characteristics of packing brine or juice after osmotic balance.
- Ref Section 9 Microbiological criteria for table olives offered for retail sale to the public.
- All testing must be undertaken by a NATA accredited laboratory.

The following minimum testing requirements have also been incorporated into the Australian International Olive Awards testing of table olives:

### 2.0 Minimum Standards

#### *Physico-chemical and microbiological test parameters*

#### **Test Package 1. Table Olives in brine - natural (unpasteurised): Brine tested**

- Minimum sodium chloride (NaCl): **6%**
- Maximum pH: **4.3**
- Microbiological Criteria - Escherichia coli: **Not detectable (<3 cfu/g)**

#### **Test Package 1. Table Olives in brine - treated with sodium hydroxide (NaOH) (unpasteurised): Brine tested**

- Minimum sodium chloride (NaCl): **5%**
- Maximum pH: **4.0**
- Microbiological Criteria - Escherichia coli: **Not detectable (<3 cfu/g)**

---

<sup>1</sup> The Voluntary Industry Standard for Table Olives in Australia (NTOC, October 2012) RIRDC 12/111:  
<https://rirdc.infoservices.com.au/items/12-111>

### Test Package 2. Table Olives in brine (Pasteurised): Brine tested

- Maximum pH: **4.3**
- Microbiological Criteria - Escherichia coli: **Not detectable (<3 cfu/g)**
- Microbiological Criteria - Lactobacillus: **Not detectable (<10 cfu/g)**

### Test Package 3. Table Olives not in brine - Dehydrated / Shrivelled (pasteurised or unpasteurised): Olives tested

- Water activity  $a_w$  <0.88
- Microbiological Criteria - Escherichia coli: **Not detectable (<3 cfu/g)**

## 3.0 Table Olive Assessment

All table olives must pass sensory and visual assessment undertaken by an approved laboratory (or through participation in a recognised table olive competition).

*In accordance with Section 5.1 IOC Method Sensory Analysis of Table Olives COI/OT/MO No 1/Rev.2, November 2011.*

### **Sensory attributes:**

**Bitterness:** The olive shouldn't be bitter to taste but some bitterness can be balanced by the amount of saltiness and olive flavour.

**Saltiness:** The level of salt governs the flavour of the olive and must be balanced with the bitterness and acidity.

**Flavour:** the olive should have an appealing fruit flavour, which for green olives often is a typical fermentation taste but retaining 'olive' character, and for black olives is a stronger olive flavour.

**No negative attributes:** There should be no taste or aroma faults that would render the product unmarketable: Abnormal fermentation (faecal, putrid, butyric, zapatera), musty, rancid, 'cooked', soapy, metallic, earthy, **winey-vinegary\***, or as reflected in achieving a score of 15 or more out of 30 points.

**Abnormal fermentation** Olfactory sensation perceived directly or retro nasally, characteristic of abnormal fermentations. Such fermentation may be:

- **Putrid:** sensation reminiscent of the odour of decomposing organic matter.
- **Butyric:** sensation reminiscent of butter or cheese.
- **Zapateria:** sensation caused by the combination of volatile fatty acids reminiscent of rotten leather.

**Musty:** Olfactory-gustatory sensation perceived directly or retronasally, characteristic of olives attacked by mould.

**Rancid:** Olfactory sensation perceived directly or retro nasally, characteristic of olives that have undergone a process of rancidity.

**Cooked:** Olfactory sensation perceived directly or retro nasally, characteristic of olives that have undergone excessive heating in terms of temperature and/or duration during pasteurisation or sterilisation.

**Soapy:** Olfactory–gustatory sensation reminiscent of soap.

**Metallic:** Olfactory–gustatory sensation reminiscent of metals.

**Earthy:** Olfactory-gustatory sensation reminiscent of soil or dust.

**Winey–vinegary:** Olfactory–gustatory sensation reminiscent of wine or vinegar. (\*except for table olives pickled using vinegar eg traditional Kalamata method)

**Note:** The IOC Trade Standard states that olives may not be sold as table olives where the defect predominantly perceived (DPP)  $\geq 7.0$  (which is astounding given these olives would be inedible!)

### ***Visual attributes:***

Samples must be visually appealing:

**SKIN:** The skin of the fruit should be fine, smooth and not wrinkled, yet elastic and resistant to handling damage.

**FLESH:** Should be firm but not woody or granular. Green olives should have firm, crisp flesh, ripe or black olives will have softer flesh due to the fruit being more mature than green olives, however it shouldn't be soggy or flabby.

**BLEMISHES:** Blemishes should be absent however some white spots on green olives are natural. Others such as gas pockets or blistering are caused by processing and organisms and will reduce the point score.

**COLOUR:** Green olives should be bright green to strawy green colour. Some dulling may occur after several months in brine. Lye treated green olives are very bright green. Olives turning colour should be pale pink, and black olives vary from dark pink to black or winey colour.



## 4.0 Table Olives Labelling Requirements

The following *Certified Australian Table Olives™ logo* is for the exclusive use of Code Signatories, and indicates a product bearing this logo is compliant with the *Voluntary Industry Standard for Table Olives in Australia (RIRDC 2012)*

Table olives must be labelled in accordance Part 11 of the Voluntary Industry Standard for Table Olives in Australia, and consistent with Food Standards Australia New Zealand Food Authority - Food Standards Code, including providing a list of ingredients, the net drained weight and the application of a 'Best Before' date (not exceeding 2 years) to be determined by the producer after which time undesirable changes to the odour, colour, texture or flavour of the product may occur (FSANZ – Food Standards Code Part 1.2.5)

## 5.0 Approved Testing Laboratories

### Modern Olives Laboratory Services

P.O. Box 92 Lara, Victoria

3212 - AUSTRALIA

T: +61 (0) 3 5272 9500 | F: +61 (0) 3 5272 9599 |

E: [lab@modernolives.com.au](mailto:lab@modernolives.com.au) | [www.modernolives.com.au](http://www.modernolives.com.au)

### South Australian Analytical Laboratory (SAALS)

Sinan Al Bayati | Business Development & Client Service

51-53 Lavinia Street,

Athol Park, SA 5012

P: 1300 386 811

E: [lab@saals.com.au](mailto:lab@saals.com.au)

M: 0413 428 428

W: [www.saals.com.au](http://www.saals.com.au)

### ALS Food & Pharmaceutical

22 Dalmore Drive, Scoresby VIC 3179

Phone: +61 3 8756 8111 Fax: +61 3 9763 1234

<http://www.alsglobal.com/>

### Silliker Australia Head Office (lab & office)

(also Brisbane Sydney & Perth)

Kim Manning / Technical Sales Co-ordinator

20-22 King Street, Blackburn

VIC Australia 3130

Tel: +61 (3) 8878 2100

Email: [sales.au@mxns.com](mailto:sales.au@mxns.com)

<http://www.merieuxnutrisciences.com.au/au/eng/contacts/contact>

### National Measurement Institute

1/153 Bertie Street, Port Melbourne Vic 3207

Tel: +61 3 9644 4888 Fax: +61 3 9644 4999

Web: [www.measurement.gov.au](http://www.measurement.gov.au) Email: [customerservice@measurement.gov.au](mailto:customerservice@measurement.gov.au)

## 6.0 Indicative Test Prices:

Test	Modern Olives (prices include GST) 2018 2017	SAALS 2018	Silliker Australia (prices include GST) 2018	ALS 2018	National Measurement Institute 2017	Uni Adelaide 2018
NaCl	\$31.50	63.35+GST	\$43.69	\$20.00+GST		Free: Competition testing only
Water Activity		39.04+GST	\$57.97			
pH	\$10.00	15.86+GST	\$24.17	\$8.00+GST		Free: Competition testing only
E. coli and coliform (PF)	-	16.62+GST	\$24.53 each	\$20.00+GST		
Lactobacillus	-	28.82+GST	\$61.42	\$17.00+GST		
Yeast & Mould	-	22.18+GST	\$23.56			
Clostridium perfringens	-	26+GST	\$48.57			
Coag +ve Staph	-	25.49+GST	Spread Plate \$31.20			
Salmonella / 25 g	-	44.90+GST	\$57.02			
Listeria mono / 25 g	-	54.88+GST	\$57.02			
*Full Microbiology	\$250.00	170.71+GST	\$218.34			
Test package 1	\$132.00		\$119.40			
Test package 2	\$127.00		\$137.14			
Test package 3	\$120.00		\$109.52			
DEHP Method and LOR	\$100 - \$195.94		\$448.80		\$150 - \$310 +GST	
Pesticide Residues – supermarket screen	\$412.50	327.33+GST	\$448.80		\$300 + GST	
Nutrition Panel	\$420.00	370+GST	incl Dietary Fibre \$472.43			
Sensory # (defects only)	\$47.00		\$14.40			

\*Salmonella, E.Coli, Cogaulase +, C. Perfringens, Listeria.

# Sensory tasting only will be done if microbiology tests are included, otherwise only visual inspection will be carried out.

Updated: 8/6/2018



Australian Olive Association LTD  
C/O PO Box 661, BAULKHAM HILLS NSW 2153  
Phone: +61 (0)478 606 145

[secretariat@australianolives.com.au](mailto:secretariat@australianolives.com.au) <http://www.australianolives.com.au>