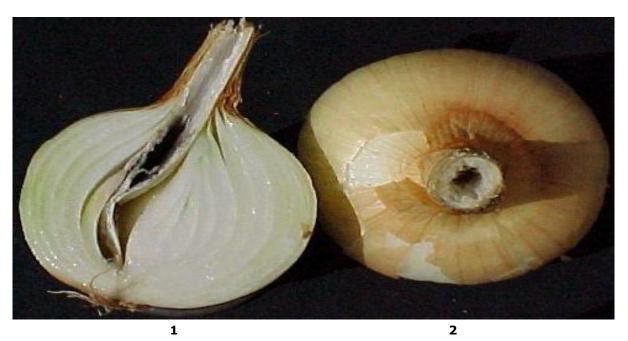
COLOUR CHARTS PRESCRIBED FOR EXPORT ONIONS
Important note:
The below colour charts should be read in conjunction with the export standards and requirement prescribed for fresh vegetables under the banner of the Agricultural Product Standards Act 119 of 1990.

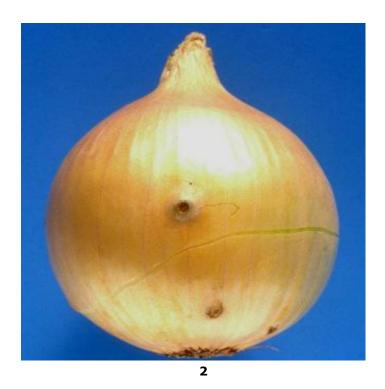
### **HOLLOW/SEED STEM**



Onions	Class I	Class II	Out of Grade	Notes
Hollow/seed stem	×	x	1, 2	Class I: Shall not occur. Class II: Shall not occur.

#### **DAMAGE CAUSED BY PESTS**





Onions	Class I	Class II	Out of Grade	Notes
Damage caused by pests	X	X	1, 2	Class I: Insect damage that affects the first fleshy bract, is not permissible.  Class II: Damage to a maximum depth of two fleshy bracts is permissible: Provided that not more than 15% of the bulb shall be cut away with straight cuts to remove the damaged portions.

### **LENGTH OF THE STEM/TOPS**



Onions	Class I	Class II	Out of Grade	Notes
Length of the stem/Tops	1, 2, 3, 4	1, 2, 3, 4	5	Class I: Shall be cut or clipped off and may not be longer than 60 mm.  Class II: Shall be cut or clipped off and may not be longer than 60 mm.

#### **SPROUTED**



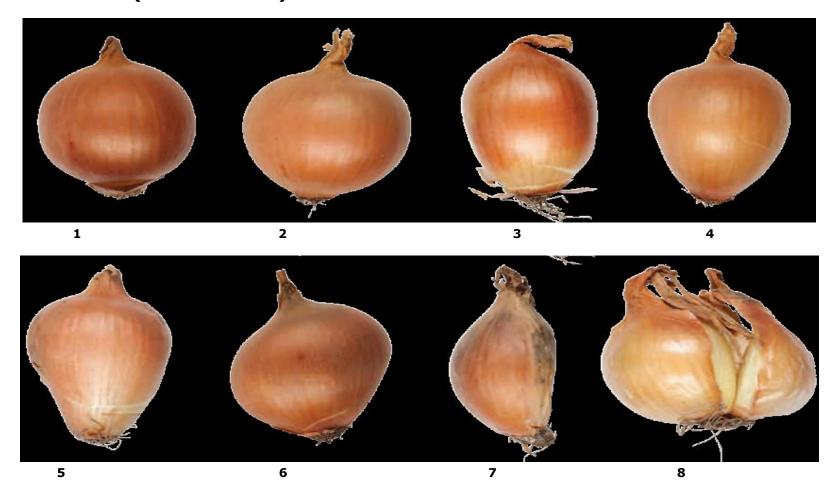
Onions	Class I	Class II	Out of Grade	Notes
Sprouts	1	1	2, 3, 4, 5	<b>Class I:</b> Sprouts (external visible sprouts) shall not occur.
				<b>Class II:</b> Sprouts (external visible sprouts) shall not occur.

#### **ROOT TUFTS**



Onions	Class I	Class II	Out of Grade	Notes
Root tufts	1, 2	3	X	Class I: No roots longer than 20 mm.
				Class II: No roots longer than 30 mm.

# **DEFECTS IN SHAPE (ROUND TYPE)**



Onions	Class I	Class II	Out of Grade	Notes
Defects in shape (round type)	1, 2, 6	3, 4, 5	7, 8	Typical of the cultivar concerned: Provided that onions with a shape which differ significant from the predominant shape of the rest of the onions in the container, shall be regarded as a deviation.

# **DEFECTS IN SHAPE (ELONGATED TYPE)**



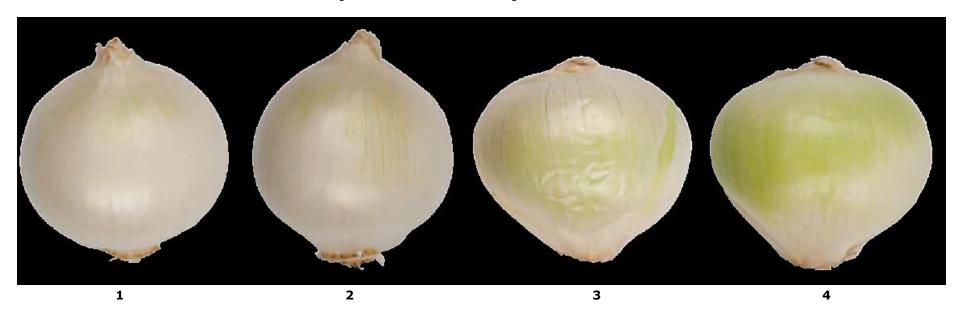
Onions	Class I	Class II	Out of Grade	Notes
Defects in shape (elongated type)	1, 2, 3	4, 5	Х	Typical of the cultivar concerned: Provided that onions with a shape which differ significant from the predominant shape of the rest of the onions in
				the container, shall be regarded as a deviation.

## **GREENISH DISCOLOURATION (BROWN ONIONS)**



Onions	Class I	Class II	Out of Grade	Notes
Greenish discolouration (brown onions)	1, 2	3	4	Class I: Light greening on not more than 50% of the total area of the bulb is permissible: Provided that the greening is not deeper than one fleshy bract.  Class II: Light greening and dark greening not deeper than two fleshy bracts are permissible.

## **GREENISH DISCOLOURATION (WHITE ONIONS)**



Onions	Class I	Class II	Out of Grade	Notes
Greenish discolouration (white onions)	1, 2	3	4	Class I: Light greening on not more than 50% of the total area of the bulb is permissible: Provided that the greening is not deeper than one fleshy bract.
				<b>Class II:</b> Light greening and dark greening not deeper than two fleshy bracts are permissible.

#### **CRACKS OF THE SKIN**



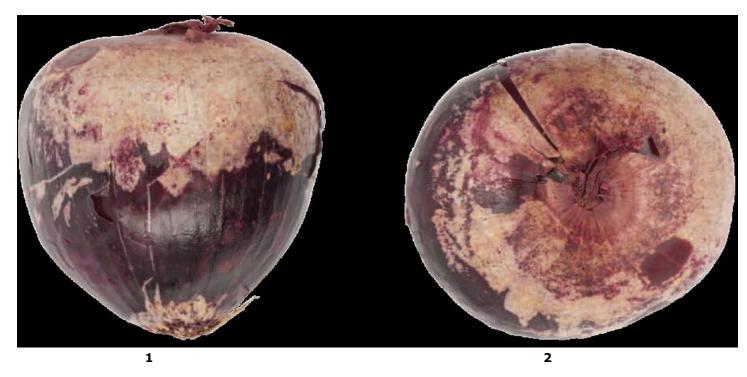
Onions	Class I	Class II	Out of Grade	Notes
Cracks of the skin/bracts	1,3, 4, 9	2, 5, 6	7, 8	Class I: Shall be covered with a dry bract. A crack of
				5 mm wide is permissible: Provided that the flesh is not
				damaged.
				Class II: Shall be covered with a dry bract for at least
				50% of the surface of the bulb and shall be fairly free from
				loose bracts:Provided that the flesh is not damaged.

## **STAINING (BROWN ONIONS)**



Onions	Class I	Class II	Out of Grade	Notes
Staining (brown onions)	1, 2, 3	4	5, 6	Class I: Not more than 20% of the surface of the outer dry bracts of the bulb may show stains: Provided that the fleshy bracts shall show no stains.  Class II: Not more than 50% of the surface of the dry bracts of the bulb may show stains: Provided that the fleshy bracts shall show no stains.

### **STAINING DUE TO SUNBURN (RED ONIONS)**



Onions	Class I	Class II	Out of Grade	Notes
Staining due to sunburn (red onions)	х	x	1, 2	Class I: Not more than 20% of the surface of the outer dry bracts of the bulb may show stains: Provided that the fleshy bracts shall show no stains.  Class II: Not more than 50% of the surface of the dry bracts of the bulb may show stains: Pro. vided that the fleshy bracts shall show no stains.

### STAINING DUE TO WET WEATHER DURING HARVEST (RED ONIONS)



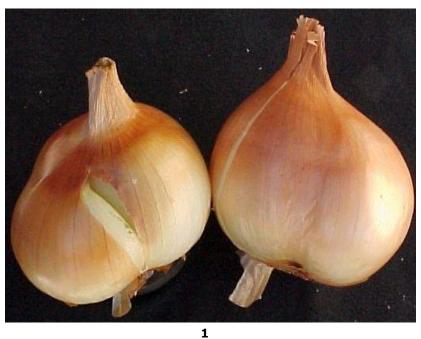
Onions	Class I	Class II	Out of Grade	Notes
Staining due to wet weather during harvest (red onions)	X	Х	1, 2	Class I: Not more than 20% of the surface of the outer dry bracts of the bulb may show stains: Provided that the fleshy bracts shall show no stains.  Class II: Not more than 50% of the surface of the dry bracts of the bulb may show stains: Provided that the fleshy bracts shall show no stains.

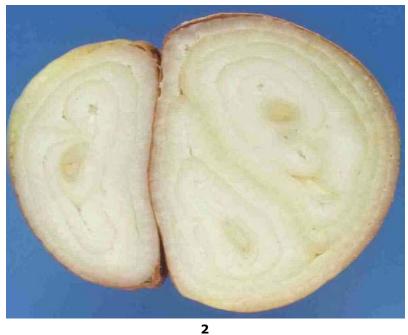
#### **BRUISING**



Onions	Class I	Class II	Out of Grade	Notes
Bruising	х	х	V	Class I: Bruise that affects the first fleshy bract, is not permissible.  Class II: A maximum of 10% of the surface of the bulb may show bruises which are not deeper than two fleshy bracts: Provided that the damaged portions are not spongy and watery.

## **DOUBLE BULBS (EXTERNAL AND INTERNAL)**



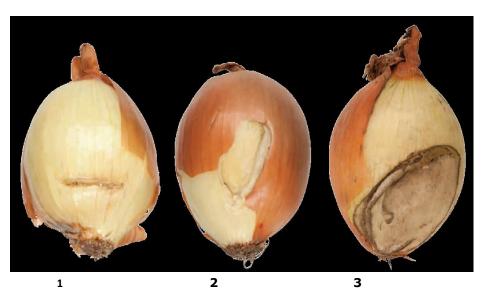


Onions	Class I	Class II	Out of Grade	Notes
Double bulbs	Х	x	X	Class I: Shall not occur.
<ol> <li>External</li> <li>Internal</li> </ol>				Class II: Double bulbs which are entirely covered with the same dry bract, are permissible.

#### **EXAMPLE OF VARIATION IN SHAPE OF DIFFERENT VARIETIES**



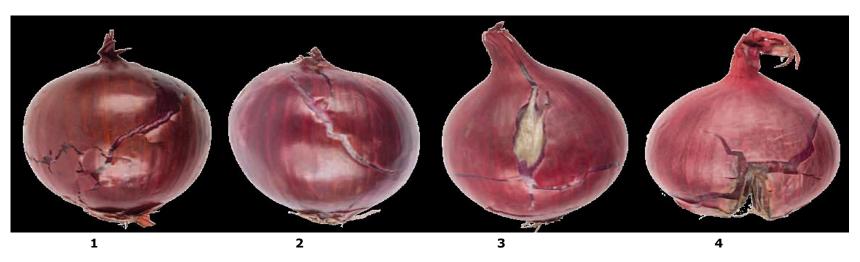
### UNHEALED INJURIES/MECHANICAL DAMAGE (BROWN ONIONS)





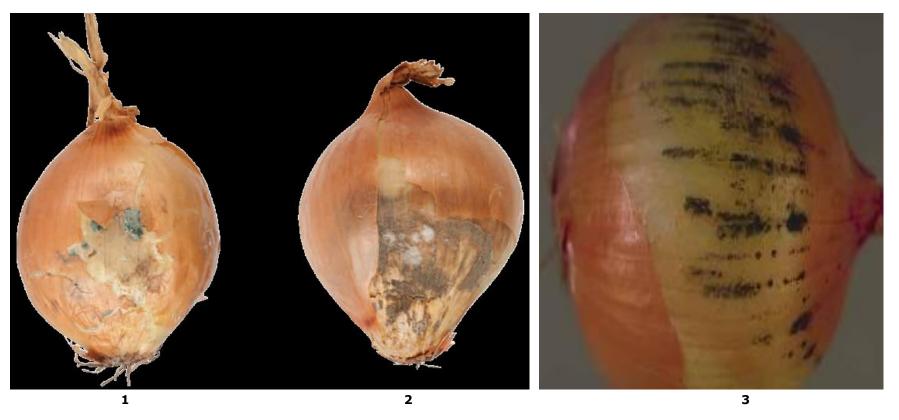
Onions	Class I	Class II	Out of Grade	Notes
Unhealed injuries/ mechanical damage (brown onions)	х	х	1, 2, 3,4 5	<b>Class I:</b> Mechanical damage that affects the first fleshy bract, is not permissible.
				<b>Class II:</b> Damage to a maximum depth of two fleshy bracts is permissible: Provided that not more than 15% of the bulb shall be cut away with straight cuts to remove the damaged portions.

## UNHEALED INJURIES/MECHANICAL DAMAGE (RED ONIONS)



Onions	Class I	Class II	Out of Grade	Notes
Unhealed injuries/mechanical damage (red onions)	х	1	2, 3,4	<b>Class I:</b> Mechanical damage that affects the first fleshy bract, is not permissible.
				Class II: Damage to a maximum depth of two fleshy bracts is permissible: Provided that not more than 15% of the bulb shall be cut away with straight cuts to remove the damaged portions.

# **DRY MOULD GROWTH (BROWN ONIONS)**



Onions	Class I	Class II	Out of Grade	Notes
Dry Mould growth (brown onions)	x	x	1, 2, 3	Class I: Free from black mould.
				<b>Class II:</b> Not more than 10% of the surface area of the bulb may be affected with black mould.

# MOULD GROWTH (RED ONIONS)



Onions	Class I	Class II	Out of Grade	Notes
Dry Mould growth (red onions)	x	1	2	Class I: Free from black mould. Class II: Not more than 10% of the surface area of the bulb may be affected with black mould.

# **DRY MOULD ON THE FLESH (WHITE ONIONS)**



Onions	Class I	Class II	Out of Grade	Notes
Dry Mould growth (white onions)	x	х	1, 2	Class I: Free from black mould. Class II: Not more than 10% of the surface area of the bulb may be affected with black mould.

# **DECAY (RED ONIONS)**





Onions	Class I	Class II	Out of Grade	Notes
Decay (red onions)	×	×	1, 2, 3	Class I: Shall not occur. Class II: Shall not occur.

# **NOT SOUND (RED ONIONS)**



Onions	Class I	Class II	Out of Grade	Notes
Not sound (red onions)	Х	Х	1, 2	Class I: Shall not occur. Class II: Shall not occur.

# **FOREIGN MATTER (SOILED)**



Onions	Class I	Class II	Out of Grade	Notes
Foreign matter (soiled)	X	X	1, 2, 3, 4, 5, 6	Class I: Shall not occur.
				Class II: Shall not occur.

# **FOREIGN MATTER (NOT CLEAN)**



Onions	Class I	Class II	Out of Grade	Notes
Foreign matter (not clean)	X	X	1, 2	Class I: Shall not occur.
				Class II: Shall not occur.

## **FROST DAMAGE (EXTERNAL)**



Onions	Class I	Class II	Out of Grade	Notes
Frost damage (external)	x	х	1, 2	Class I: Shall not occur. Class II: Shall not occur.

#### **HEAT DAMAGE**



Onions	Class I	Class II	Out of Grade	Notes
Heat damage	Х	х	V	Class I: Shall not occur. Class II: Shall not occur.

# **TYPICAL CLASS I QUALITY**



Onions	Class I	Class II	Out of Grade	Notes
Length of the stem/Tops	V	V	х	Class I: Shall be cut or clipped off and may not be longer than 60 mm.
				<b>Class II:</b> Shall be cut or clipped off and may not be longer than 60 mm.

# TYPICAL CLASS II QUALITY



Onions	Class I	Class II	Out of Grade	Notes
Length of the stem/Tops	Х	√	х	Class II: Shall be cut or clipped off and may not be longer than 60 mm.

## **EQUIPMENT FOR SIZING**





Onions	Class I	Class II	Out of Grade	Notes
Sizing				Minimum size and uniformity should be done according to size ranges as set out in the Standards and Requirements.

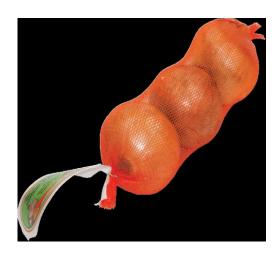
#### **EXAMPLES OF TYPES OF PACKING**













#### MARKING REQUIREMENTS



