	<b>PRODUCT SPECIFICATION</b>		
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**Product description: Red Grapefruit (Star Ruby) Pulp Cells (Aseptic)**

Product is produced from the reddish varieties (*Citrus paradisi*). Only sound and fully ripe fruit is used. The juice is extracted using FMC or Brown extractors, the pulp cells recovered by finishers, pasteurized and filled aseptically into open head drums. The processes are closely monitored and verified to ensure the required temperature and time is achieved. Good Manufacturing Practices are adhered to.

Category: Fruit concentrate as primary product for juices, nectars and confectionary.

**Product code : 01GFCEA200SR or 01GFCEA240SR**

**1. Chemical and physical specifications.**

Brix refractometer	8.0 – 14.0
% Acidity as citric acid at pH 8.1	0.9 – 1.2 for 80% of the crop
Ratio – Brix corrected / acid	80% of the crop ratio is 7 - 9. 15% of the crop ratio is > 9 5% of the crop ratio is < 7 These figures may vary from season to season
pH	2.9 – 3.6
% Pulp as per FMC method (Quick fiber)	≥75.0
Pectin esterase enzyme	Negative
Defects ≤0.5 mm per 50 grams (minor defects)	Black specs ≤ 5 Brown specs ≤ 5 Peel pieces ≤ 10 Immature pip fragments ≤ 25 Albumin pieces ≤ 25
Defects ≥0.5 mm per 50 grams (major defects)	Black specs ≤ 2 Brown specs ≤ 3 Peel pieces ≤ 10 Immature pip fragments ≤ 10 Insects or larva - absent

**2. Microbiological specifications**


Total plate count (cfu/ ml)	<10
Yeast (cfu/ ml)	<1
Mold ( cfu/ ml)	<1
Thermophilic acidiphilic bacteria (TAB) (cfu/10 ml)	Absent
Heat resistant mold (cfu/10 ml)	Absent

**3. Sensory specifications**

Colour	Light red colour
Appearance	Fibers and viscous
Taste/ flavor	Full typical grapefruit flavor, free from undesirable flavors, caramelization and oxidation.

**4. Ingredients for concentrate**

Red Grapefruit Cells

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### 5. Packaging

200 Lt	240 Lt	Open head drum with one aluminum aseptic food grade bag and one open top bag. Drums are sealed with uniquely numbered seals.
200 kg	240 kg	Net weight per drum
216 kg	257.5 kg	Gross weight per drum (approx.)

### 6. Shelf life

Twenty-four months (unopened) at 0 - 10°C under hygienic storage conditions. Storage at ambient temperature will shorten the shelf life of the product.  
One week (opened) under hygienic conditions at <10°C.

### 7. Storage and transport

Store at 0 - 10°C and under hygienic storage conditions. Transport in clean, dry vehicles, used for foodstuffs at refrigerated temperature.

### 8. Labelling and traceability

Following appears on label: Product code and Name, Production and Expiry date, Brix, Ratio, Net and Gross weight, Country of Origin, Storage conditions, Batch number and Drum number.

### 9. Allergens

None

### 10. Vegetarian status

Suitable for strict lacto and ovo vegetarian diet.

### 11. Religious status

Kosher and Halaal


### 12. Genetic modified status

GMO and GMO derivatives free

### 13. Comply with the following legislation and standards.

Cape fruit processors will ensure the product complies with the legislation and standards of country of destination when shipped outside South Africa

Authenticity	GNR286: Regulations relating classification, packaging, marketing of juice and drinks intended for sale in South Africa as contained in the Agricultural Product Standards Act 119 of 1990 and amendments.
Hygiene	Prerequisite Programs on Food safety: ISO/TS22002-1
Contaminants and Residues	<p><b>Heavy Metals</b> - Compliance with GNR 500/2004, GNR 545/2008 and amendments. Regulations relating to maximum levels for metals in foodstuffs as contained in Foodstuffs, Cosmetic and Disinfectant Act 54 of 1972.</p> <p><b>Pesticide residues</b> – Compliance with GNR 246/1994, GNR 46/2012 and amendments. Regulations relating to maximum limits for Pesticide residues that may be present in foodstuffs as contained in the Foodstuffs, Cosmetic and Disinfectant Act 54 of 1972.</p>

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	<b>Mycotoxins</b> - Compliance with GNR 1145/2004. Regulations governing tolerance for fungus produced toxins in foodstuffs as contained in Foodstuffs, Cosmetic and Disinfectant Act 54 of 1972.
Food allergen information	Compliance with GNR 146 of March 2010. Regulations relating to the labelling and advertising of foodstuffs as contained in the Foodstuffs, Cosmetic and Disinfectant Act 54 of 1972 and amendments.
Metrology	Compliance with Trade Metrology Act 77 of 1973 and amendments.

#### 14. Country of origin

South Africa
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#### 15. Acceptance of specification by customer

Accepted by (Name)	Signed	Position	Date