FRUIT'N'VEG SANITISER

For sanitising fresh produce

Product Data Sheet | Product Code: FRU | Issued: April 19, 2016

What is Fruit'N'Veg Sanitiser?

FRUIT'N'VEG SANITISER is a food-contact approved solution of sodium hypochlorite in water with an available chlorine content of 5% when packed. Because it offers a very effective method of killing undesirable micro-organisms (germs, bacteria, etc.), FRUIT'N'VEG SANITISER is an excellent sanitiser for fresh produce.

Key Benefits

- ✓ FRUIT'N'VEG SANITISER is a very effective germ-killer.
- ✓ Excellent sanitiser for fresh produce.
- ✓ Approved for food contact
- ✓ Very economical.

How Does It Work?

FRUIT'N'VEG SANITISER contains available chlorine which is present in the solution in the form of sodium hypochlorite and hypochlorous acid. Hypochlorous acid is a powerful germ-killing agent which kills bacteria, yeasts, moulds and many viruses.

Caution

NEVER MIX FRUIT'N'VEG SANITISER WITH ANY OTHER CHEMICALS, especially acids, as this may produce toxic chlorine gas or other poisons. Avoid splashing FRUIT'N'VEG SANITISER on clothing as it will burn holes in cotton and other fabrics.

For Use On…

It is excellent for sanitising fruit and vegetables and food-preparation work surfaces, utensils and equipment.

Technical Data

Composition

FRUIT'N'VEG SANITISER contains sodium hypochlorite in solution with sodium chloride which acts as a stabiliser. Chlorine is decomposed by heat and sunlight so FRUIT'N'VEG SANITISER should be stored in a cool place away from direct sunlight.

Properties

COLOUR – Pale, yellow-green liquid
ODOUR – Chlorine odour
AVAILABLE CHLORINE LEVEL = 5 % when packed
pH = 10.5
FOAM – Non-Foaming

Environmental Care

FRUIT'N'VEG SANITISER conforms with all statutory environmental requirements. It is based on safe ingredients selected to perform efficiently so there is no waste or damage. FRUIT'N'VEG SANITISER is non-flammable, phosphate-free and biodegradable. FRUIT'N'VEG SANITISER containers will be cleaned and reused if returned to Agar Cleaning Systems Pty Ltd, significantly reducing plastic usage and waste. They can also be recycled.

Quality

The design, manufacture and supply of all Agar chemical products is controlled by the Agar Quality Management System which is registered and externally audited by SAI Global as complying with the requirements of AS/NZS ISO 9001 "Quality Management Systems – Requirements".

First Certified: 30 April 1996

SAI Certificate No.: QEC7358

Cleaning and sanitising fresh produce

Source: Modified Extract from NSW Food Authority

Raw fruits and vegetables may be contaminated with microorganisms, including pathogenic E.coli, Salmonella and Listeria monocytogenes. Washing raw produce with chlorine has been shown to reduce the number of microorganisms. If facilities prepare their own salads, it is recommended that washing and sanitising salad vegetables is an important part of an overall strategy to reduce the risk of microorganisms. It is recommended that all fruits and vegetables be washed in clean water then sanitised by soaking in 100 ppm (free) chlorine for 5 minutes such as 0.2% Fruit'N'Veg Sanitiser (1:500).

Sodium hypochlorite is a chlorine based chemical that is a permitted washing agent for food manufacture. Residues at amounts up to 1 mg/kg of the final product (Food Standards Code (FSC) 1.3.3) are permitted on the food. All facilities are slightly different and therefore this system should be trialled first. When making up the sanitiser solution it is essential that quantities be measured out accurately. In addition, appropriate chemical training for operators preparing the sanitising wash is also important and must also be demonstrated.

Australian Made Australian Owned

MELBOURNE
Agar Cleaning Systems P/L
12-14 Cope Street
Preston VIC 3072
Ph: (03) 9480 3000

ADELAIDE
Agar Cleaning Systems P/L
Unit 1, 59-63 Mooringe Ave
Plympton SA 5038
Ph: (08) 8293 2020

BRISBANE
Agar Cleaning Systems P/L
Unit 14, 28 Bangor Street
Archerfield QLD 4108
Ph: (07) 3274 3438

SYDNEY
Agar Cleaning Systems P/L
Unit 4, 25 George Street
North Strathfield NSW 2137
Ph: (02) 9743 6020

PERTH
Briskleen Supplies
38 Mulgul Road
Malaga WA 6090
Ph: (08) 9249 4566

Cleaning and sanitising fresh produce (continued)

- **Undamaged clean, fresh produce:** It is important to purchase clean, undamaged, fresh produce. Damaged produce can allow pathogens to enter the tissues and chlorine may not reach the pathogens. Chlorine rapidly loses its effectiveness on contact with dirt, organic matter and when exposed to air, light or metals. Therefore, make sure all soil is removed before soaking in the chlorine sanitising solution and periodically check the level of sanitiser if you are washing a lot of vegetables.
- **Wash water temperature:** The temperature of the wash water and the chlorine sanitising solution is also important. The wash and sanitising water temperature should be slightly warmer (about 5 - 10 degrees) than the produce to prevent water being sucked inside the fruit or vegetable. If the wash water is cooler than the vegetables, water can be absorbed into the tissues along with any bacteria present.
- **Addition of wetting agent:** Sometimes microorganisms sit in the nooks and crannies of the vegetables and don't get exposed to the sanitising wash treatment. You can increase the effectiveness of your chlorine sanitising solution if you add a wetting agent (surfactant). This step is optional but it will help the chlorine to get into these small spaces. Sodium lauryl sulphate is an example of a generally permitted processing aid FSC1.3.3 (3) which is an effective wetting agent.
- **Contact time:** For the chlorine to work effectively, it needs to be in contact with the food surface for sufficient time to be able to kill bacteria. This is known as contact time and it is very important to allow the produce to soak in the Fruit'N'Veg Sanitiser solution.

To maximise the effect of chlorine sanitiser solution it is important to closely follow the procedures set out below.

Application

1. Make sure your produce is free of dirt, undamaged and pre-cooled in a refrigerator.
2. Pre-wash in water (at least 10^{O}C warmer than the temperature of the produce) to remove excess soil and dirt. You could wash produce that has visible dirt in water containing sodium bicarbonate (or any other approved mild alkali cleaning agent).

Application (continued)

3. **Dilute FRUIT'N'VEG SANITISER to 1 in 500 (100 ppm available chlorine).** Measure out the Fruit'N'Veg Sanitiser, using this table to achieve a suitable volume of 100pm concentration of available chlorine:

Fruit'N'Veg Sanitiser with 5% available (free) chlorine can be diluted using the table below to achieve a 100 ppm concentration of available chlorine.

For **100ppm** Available Chlorine		
Volume of water	**Plus Fruit'N'Veg Sanitiser (5% av chlorine)**	**Wetting agent (optional)**
1 litre	2ml	1ml
5 litres	10ml	3ml
10 litres	20ml	7ml
50 litres	100ml	35ml

- **Make sure you follow your occupational health and safety requirements for handling and preparing chlorine solutions,**
- Use a single, designated sink for washing fruits and vegetables, mark a fill line in the sink for the correct water level. Fill with water up to the correct level and then add the Fruit'N'Veg Sanitiser. You should make only enough for one batch and use immediately. Ideally you should purchase test strips to check the level of chlorine and record the date, time and chlorine concentration in a special book every time you make up a Fruit'N'Veg Sanitiser solution. Monitor this level regularly if washing a large quantity of produce,
- Add the (optional) wetting agent (eg. sodium lauryl sulfate),

4. Add washed produce and agitate to ensure that all surfaces are wet and there are no bubbles.
5. Soak time 5 minutes.
6. Do not rinse (if the final level of chlorine residue in the final product complies with the Australia New Zealand Food Standards Code – Standard 1.3.3 – Processing Aids See Section 12).
7. Dilute and dispose of the Fruit'N'Veg Sanitiser solution in accordance with your sewerage authority requirements.
8. Prepare and use the next batch of Fruit'N'Veg Sanitiser solution only when needed, do not store.
9. Make sure you carefully follow the manufacturer's instructions for quantities, contact time and water temperature.

AGAR™ Australian Made Australian Owned

MELBOURNE
Agar Cleaning Systems P/L
12-14 Cope Street
Preston VIC 3072
Ph: (03) 9480 3000

ADELAIDE
Agar Cleaning Systems P/L
Unit 1, 59-63 Mooringe Ave
Plympton SA 5038
Ph: (08) 8293 2020

BRISBANE
Agar Cleaning Systems P/L
Unit 14, 28 Bangor Street
Archerfield QLD 4108
Ph: (07) 3274 3438

SYDNEY
Agar Cleaning Systems P/L
Unit 4, 25 George Street
North Strathfield NSW 2137
Ph: (02) 9743 6020

PERTH
Briskleen Supplies
38 Mulgul Road
Malaga WA 6090
Ph: (08) 9249 4566