

NATRApHASE[®] FVS
(Patented)

Natural Post-Harvest
Whole Fresh Fruit and Vegetable Wash

Table of Contents

Page

1-2	NATRApHASE[®] FVS – Use in Whole Fruit and Vegetable Pre- Process Wash
3-5	NATRApHASE[®] FVS – Material Data Sheet and Specification

PRODUCE DESCRIPTION AND SPECIFICATION

Description: NATRApHASE® FVS is a clear liquid. A blend of EU and FDA Food Approved acidulants which have been specifically formulated and synergistically blended to inhibit micro-organism, yeast and mold. The product is extremely effective when applied to fresh Post-Harvest pre-cut fruit and vegetables with high organic/biofilm loadings. All ingredients are classified GRAS (Generally Recognised as Safe) and natural by the FDA.

Potential Benefits:

- NATRApHASE® FVS is a new, patented and innovative processing aid designed to maximise micro-organism, yeast and mold destruction achieving a 100% kill level or Log Reductions of 7+ .
- Specifically formulated to extend the shelf life and observed freshness of fresh, pre-cut fruit and vegetables without affecting the organoleptic and sensory properties with no loss of nutritional value.
- Breaks down harmful biofilm which eradicates the enclosed bacteria and provides residual effects to avert further infection.
- Consumer/Food Processor friendly alternative to traditional decontaminants. It is designed to replace the more hazardous agents such as chlorine, chlorine dioxide, per acetic acid, ozone, metabisulphite and SO₂. It is safe and simple to handle - no fumes liberated, no bad odour facilitating a safer and healthier work environment.
- Maintains efficacy when exposed to organic matter, unlike chlorine based products.
- Washes away pesticides, herbicides, fungicides and fertiliser residues.
- Does not contain synthetic biocides or antibiotics.
- Non-mutagenic
- Non - lachrymatory
- Biodegradable
- Very soluble in water
- Concentration measured by conductivity monitoring providing consistent quality from batch to batch improving efficiency and cost effectiveness.

Application:

NATRApHASE® FVS may be applied to whole fruit and vegetables by dipping, spraying and fogging techniques. Examples of Fruit and Vegetable where NATRApHASE® FVS is an effective wash aid:

Tubers:	Potatoes, Carrots, Celeriac
Flowery Fruits:	Broccoli
Stone Fruits:	Apricots, Plums, Nectarines
Vegetable Fruits:	Cucumbers, Peppers
Vine Fruits:	Grapes, Melons, Tomatoes, Strawberries, Raspberries
Citrus Fruits:	Lemons, Oranges, Grapefruit
Tropical Fruits:	Pineapple, Papayas, Kiwi, Mango, Melons,

Usage Levels:

Dosage depends on the level of spoilage/bio film present. For high levels we suggest a concentration of 1.50%. For lower levels 0.50%

Pack Size: Supplied in 25litre white poly jerry cans.

Materials Safety Data Sheet

NATRApHASE[®] FVS

I. PRODUCT DESCRIPTION AND SPECIFICATION

Description: NATRApHASE[®] FVS is a clear water white liquid. It consists of a proprietary blend of natural food approved acidulants and vitamins.

Specifications:	Appearance:	Clear Water White Liquid
	Taste:	Slight Acidic
	Odour:	Fresh
	Solubility:	Completely soluble in water
	pH (2.50% @15°C)	2.23 – 2.28
	Stability:	Very Stable

II. SAFETY INFORMATION

1. IDENTIFICATION

Name: NATRApHASE[®] FVS
Product Code: NBFVS025, NBFVSIBC (25 Litre, 1000 Litre)
Supplied by: Natural Biotechnology Sprl
Rue De Liege 1, 6180 Courcelles, Belgium
☎: +32 714 50026 📠: +32 241 66 378
Email: info@naturalbiotechnology.eu URL: www.naturalbiotechnology.eu

2. COMPOSITION

NATRApHASE[®] FVS is a natural clear liquid. It consists of a proprietary blend of natural food approved acidulants

3. HAZARD IDENTIFICATION

NATRApHASE[®] FVS is classified as non-hazardous.

4. FIRST AID MEASURES

Eye Contact:	Irrigate thoroughly with water, open eyelids forcibly.
Skin:	Wash affected area with water; report any skin irritation to a medical advisor.
Excessive Ingestion:	Drink copious amounts of water. Contact medical physician if discomfort occurs or persists.
Inhalation:	Non Volatile liquid product: consult medical physician if discomfort occurs or persists.

5. FIRE FIGHTING MEASURES

Product is non-combustible.

6. ACCIDENTAL RELEASE MEASURE

- Personal Precautions: Wear rubber gloves if prolonged contact with concentrated solution. Avoid contact with skin and eyes.
- Environmental: No particular/specific measures required. Can wash to drains with large amounts of water. Absorb large spillage with sand then place in a closed container for transfer to an approved waste site.

7. HANDLING AND STORAGE

Sensible precautions should be taken to avoid contact with the eyes and skin, inhalation or accidental ingestion. Observe strict cleanliness and personal hygiene at all times. Keep container tightly closed. Store in a cool, dry area at ambient temperature. Protect from excess heat, keep away from odorous and toxic substances.

8. EXPOSURE, CONTROL AND PERSONAL PROTECTION

No specific measures are required for NATRApHASE[®] FVS provided the product is handled in accordance with general rules/regulations of occupational hygiene and safety. Eye protection and PVC or rubber gloves should be worn as appropriate.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance/Colour:** Clear Water White Liquid
- Odour:** None
- Molecular Mass:** Not Relevant – Mixture
- Solubility:** Completely soluble in water
- Flash Point:** Non combustible
- Degradability:** >98% biodegradable

10. STABILITY AND REACTIVITY

NATRApHASE[®] FVS is stable under normal storage conditions. Protect from excess heat for quality reasons. Protect from frost.

11. TOXICOLOGICAL INFORMATION

- Acute Toxicity: Non-hazardous substance when used correctly
- Local effects: Mild eye irritation on contact. Unlikely to cause eye damage. Skin irritation: may give rise to a mild rash and de-fatting effect. Oxidation products irritate the skin.
- Ingestion: Non known effects
- Inhalation: No known effects
- Sensitisation: Non sensitising
- Special effects: Not mutagenic (Ames-test) Not phototoxic

12. ECOLOGICAL INFORMATION

No known adverse Eco-toxicity effects.
Greater than 98% biodegradable.
Product dissolves completely in water

13. DISPOSAL CONSIDERATION

Discharge: Treatment must be disposed/treated in accordance with The Special Waste Regulations at a

licensed incinerator or landfill site.

14. TRANSPORT INFORMATION

Not classified as hazardous for transport. Unless containers are palletised never stack more than 2 high.

15. REGULATORY INFORMATION

NATRApHASE[®] FVS is supplied for use as a pre-processing wash aid for whole fresh post-harvest fruit and root vegetables and is not for retail sale. Classification and labelling is in accordance with Regulation (EC) No 1333/2008 - Processing Aids and (2) Regulation (EU) No 1169/2011 Labelling Regulation.

16. ADDITIONAL INFORMATION

NATRApHASE[®] ABAF satisfies:

Food Chemical Codex 5th Edition specifications

Categorised: Generally Recognised as Safe (GRAS) by the FDA

Produced under ISO9001:2000 Certified Quality Management Systems, GMP and BRC approved.

Shelf Life of NATRApHASE[®] ABAF is twelve (12) months from production date.

17. INFORMATION ON USE

Uses: NATRApHASE[®] FVS is a natural pre-process wash aid for use in whole fruit and root vegetable decontamination.

18. ADDITIONAL INFORMATION

Country of Manufacture: United Kingdom

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