

FoodCare[®] FCAV

Anti-Browning and Anti "After Cooking Darkening" Processing Aid for Root Vegetables

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PRODUCE DESCRIPTION AND SPECIFICATION

Description: FoodCare® FCAV is a white fine granular powder. A blend of European Union and FDA Food Approved, GRAS status, label friendly acidulants which have been synergistically blended to delay enzymic browning and "After Cooking Darkening" in potatoes, turnips, parsnips, celeriac, cabbage, cauliflower asparagus and "white blush and dehydration" in carrots, enabling a longer shelf life without affecting the organoleptic and sensory properties with no loss of nutritional value.

Potential Benefits:

FoodCare® FCAV is an innovative Anti Browning and Anti "After Cooking Darkening" Processing Aid which:

- Extends the shelf life and freshness of fresh, peeled, diced, cubed, raw potatoes, potatoes, turnips, parsnips, celeriac, cabbage, cauliflower asparagus and "white blush and dehydration" in carrots, enabling a longer shelf life without affecting the organoleptic and sensory and nutritional value.
- Effective for blanching as in the case of French Fries prior to par frying.
- Significantly reduces acrylamide formation at temperatures above 120°C 200°C in baked, par-fried French fries and roasted potatoes.
- Has been independently tested and validated within the market.
- It is designed to replace the more hazardous agents acid pyrophosphates (used in blanching) and metabisulphite/SO2 (used as an Anti-browning agent).
- Safe and simple to handle no fumes liberated and no bad odour facilitating a safer and healthier work environment.
- Minimal if any capital equipment expenditure required.
- Does not contain synthetic biocides or antibiotics.
- Non-mutagenic.
- Non lachrymatory
- Biodegradable
- Anti-microbial
- Very soluble in water
- Concentration measured by conductivity monitoring providing consistent quality from batch to batch improving efficiency and cost effectiveness.

Usage Levels: We generally suggest a concentration of 2.50% for fresh peeled potatoes and 0.5%

for blanching at 80°C for 10-15 minutes.

Shelf Life: The shelf life of FoodCare FCAV is one (1) year from packaging date (unopened). Store

tightly closed.

Packaging: FoodCare FCAV is available in 25.00kg poly lined cardboard boxes.

Safety & Handling: A materials Health and Data Sheet is available on pages 3-5.

MATERIAL SAFETY DATA SHEET

FoodCare FCAV

I. PRODUCT DESCRIPTION AND SPECIFICATION

Description: FoodCare FCAV is a white fine granular powder.

Specifications: Appearance: White Fine Granular Powder.

Taste: Weak Acidic

Odour: Fresh

Solubility: Very soluble in water

pH 2.50% Solution: 1.78 – 1.84

Stability: Stable

2. SAFETY INFORMATION

Name: FoodCare FCAV

Product Code: FCAV025

Supplied by: Food Care Technologies sprl

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a. **COMPOSITION**

Food approved natural acidulants and vitamins.

3. HAZARD INDENTIFICATION

 ${\sf FoodCare}^{\textstyle \textcircled{\bf R}} \ \ {\sf FCAV} \ \, {\sf is} \ \, {\sf classified} \ \, {\sf as} \ \, {\sf very} \ \, {\sf low} \ \, {\sf hazard}. \ \, {\sf There} \ \, {\sf are} \ \, {\sf no} \ \, {\sf known} \ \, {\sf health} \ \, {\sf hazards} \ \, {\sf associated} \ \, {\sf with}$

FoodCare $^{\textcircled{\textbf{R}}}$ FCAV when used as recommended.

European Union Classification under Dangerous Substances (Annex 1)

- EC No. 231-665-7
- Labels: Xi (irritant)
- Risk Phrases R41
- Safety Phrases S(2-)24-26

FoodCare FCAV does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

4. FIRST AID MEASURES

Eye Contact: Irrigate thoroughly with water, open eyelids forcibly.

Skin: Wash affected area with water (not solvents); report any skin irritation to a medical

advisor.

Excessive Ingestion: DO NOT induce vomiting. Drink copious amounts of water. Follow with Milk of

Magnesia, beaten eggs or vegetable oil. Contact medical physician immediately.

5. FIRE FIGHTING MEASURES

Non-flammable. Non-combustible.

6. ACCIDENTAL RELEASE MEASURE

Dispose in accordance with Section 13.

Wash area thoroughly with water.

Neutralise with weak alkaline solution.

Avoid contact with skin and eyes.

Do not allow release into drainage systems.

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.

Protect from light and heat.

Keep away from odorous and toxic substances.

8. EXPOSURE, CONTROL AND PERSONAL PROTECTION

An official occupation exposure limit for FoodCare FCAV has not been established but the recommended limited time working weighted average 8 hour working day is 5.00mg/m³.

Eye protection and PVC or rubber gloves should be worn as appropriate and local exhaust ventilation employed if there is a risk of exceeding the recommended exposure limit.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Colour: White Fine Granular Powder.

Assay: 100% Concentrate

Odour: Fresh

Molecular Mass: Not relevant – mixture

Bulk Density (2.50% 1.01-1.03

@20°C):

Soluble in water.

Flammability: Non-flammable, Non-combustible.

10. STABILITY AND REACTIVITY

FoodCare FCAV is stable. Protect from humidity, light and heat for quality reasons. DO NOT MIX with concentrated chlorine (bleach), ammonia based cleaners or similar products. However accidental mixing with very dilute solutions of FoodCare® FCAV with very dilute solutions of chlorine (bleach), ammonia based cleansers or similar products should not pose health or safety risks.

11. TOXICOLOGICAL INFORMATION

Oral: LD₅₀>2800 mg/kg

Local effects: May cause irritation of eyes, skin and mucous membranes.

Special effects: Not mutagenic (Ames-test)

12. ECOLOGICAL INFORMATION

FoodCare R FCAV is not expected to result in any persisting environmental influence. Material decomposes in

soil. Studies do show that there are no adverse effects of applying FoodCare FCAV directly to crops.

13. DISPOSAL CONSIDERATION

Discharge treatment must be disposed/treated in accordance with The Special Waste Regulations in accordance with local, regional and state laws and regulations.

14. TRANSPORT INFORMATION

Not classified as hazardous for transport

15. REGULATORY INFORMATION

FoodCare FCAV is supplied for use as an Anti-Browning/Anti "After Cooking Darkening" processing aid for Root Vegetable and as a pH Regulator/Stabiliser in puree, sauces, salad dressings and mayonnaise. FoodCare FCAV 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. Does not contain a toxic chemical subject to SARA TITLE 111 Section 313.

16. ADDITIONAL INFORMATION

FoodCare RCAV satisfies:

Food Chemical Codex 5th Edition specifications

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

EFSA Approved Food Intermediates

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

Shelf Life of **FoodCare FCAV** is twelve (12) months from production date.

Country of Manufacture: The Netherlands

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