

NATRApHASE[®] NP20ATP
Anti-Oxidant/Preservative for Meat, Fish and Poultry

Table of Contents

Page

2-3

NATRApHASE[®] NP20ATP – Use in Foods

4-7

NATRApHASE[®] NP20ATP – Material Safety Data Sheet and Specification

8-9

NATRApHASE[®] NP20ATP – Dietary Intolerance Data

9

NATRApHASE[®] NP20ATP - Disclaimer

PRODUCE DESCRIPTION AND SPECIFICATION

Description: NATRApHASE[®] NP20ATP (the “all in one” Antioxidant/Chelator, Carrier, Emulsifier system) is off-white to buff, crystalline powder with a slight odour. It consists of a synergistic mixture of Ascorbyl Palmitate d-a-Tocopherol and Citric Acid on a Dextrose base. It also contains an emulsifier, which enables the mixture to disperse in water at room temperature.

Specification:

Appearance: Off-white to buff, crystalline powder

Dispersion in water: Passes test

(0.1% w/w)

Total aerobic viable count: Not more than 10,000 per gm

Product	Product Code	Application	Packaging
NATRApHASE [™] NP20ATP	NP20ATP025	Meat, Vegetable and Fats, Mayonnaise dressings, Sauces, Baby Foods, Dairy Products.	25kg poly lined carton

All ingredients are Kosher, GMO and Gelatine free. NATRApHASE[®] NP20ATP is soluble in fats, oils and dispersible in water.

Functionality:

Delays lipid oxidation = longer shelf life.

Inactivation of metal ions which catalyse the initiation of oxidation processes

Makes antioxidant distribution uniform facilitating easier incorporation in liquids pastes or powders

Potential Benefits:

- Consumer friendly alternative to traditional antioxidants (BHA – and BHT based antioxidants)
- Improvement of food products by retarding lipid oxidation.
- Synergistic effect with Ascorbyl Palmitate and d-a– Tocopherol particularly when used in fats and processed foods.
- Longer shelf life of oils, fats and processed products
- Consistent product quality from batch to batch by minimising variation in taste, odour, colour and texture with no loss in nutritional value.

Main Application Areas:

- Vegetable oils, frying oils
- Dairy products and baby foods
- Snacks
- Mayonnaise dressings and sauces
- Meat products (fish, beef, pork and poultry – sausages and burgers)

Usage Levels: The exact usage dosage cannot be stated in general since it depends upon the application in question. We generally suggest a concentration of 300ppm.

Directions for Use: NATRApHASE[®] NP20ATP can be applied to complex products by spraying, dipping, kneading or injection.

Storage: Below 25°C in unopened original containers. Once opened NATRApHASE[®] NP20ATP should still be stored below 25°C in its original container and should be used within 6 months of the date on which it was first opened.

- Shelf Life:** The shelf life of **NATRApHASE[®] NP20ATP** is 6 months when stored according to recommendations.
- Packaging:** **NATRApHASE[®] NP20ATP** is available in 25kg poly lined carton. Other sizes of packaging are available upon request but will incur additional costs.
- Safety & Handling:** A materials Health and Data Sheet is available on pages 4-7.

MATERIAL SAFETY DATA SHEET

(Complies to EU directives 2001/58/CE)

ANTIOXIDANT NATRAPHASE[®] NP20ATP

I. PRODUCT DESCRIPTION AND SPECIFICATION

Description: NATRAPHASE[®] NP20ATP is an off white to buff, crystalline powder with a slight odour. It consists of a synergistic mixture of Ascorbyl Palmitate, d-a-Tocopherol and Citric Acid on a dextrose base. It also contains an emulsifier, which enables the mixture to disperse in water at room temperature.

Specifications: Appearance: Off white to buff, crystalline powder.

Dispersion in water (0.1% w/w) Passes test

Total Aerobic Viable Count: Not more than 5000 per gm

II. SAFETY INFORMATION

1. IDENTIFICATION

Name: NATRAPHASE[®] NP20ATP
Product Code: NBNP20ATP025
Supplied by: Natural Biotechnology Sprl
Rue De Liege 1, 6180 Courcelles, Belgium
☎: +32 714 50026 📠: +32 241 66 378
✉: info@naturalbiotechnology.eu 🌐: www.naturalbiotechnology.eu

2. COMPOSITION

Antioxidant mixture with Food Grade acidifier and emulsifier on Food Grade dextrose for use in food applications.

Contents:	CAS Reg No.	EINECS No
Anhydrous Dextrose:	00050-99-7	200-075-1
Ascorbyl Palmitate:	137-66-6	205 3054
Glycerol Monostearate:	31566-31-1	250-705-4
d-a-Tocopherol	10191-41-0	233 4660
Anhydrous Citric Acid	77-92-9	201 0691

3. HAZARD IDENTIFICATION

NATRAPHASE[®] NP20ATP is classified as non-hazardous.

4. FIRST AID MEASURES

Eye Contact: Irrigate thoroughly with water, open eyelids forcibly.
Skin: Brush off any adhering particles; wash affected skin with water and soap (not solvents); report any skin irritation to a medical advisor.
Inhalation: Bring immediately to fresh air; consult physician if discomfort occurs or persists.
Excessive Ingestion: Symptomatic treatment by a physician.

5. FIRE FIGHTING MEASURES

Combustible powder. Use water spray, foam, powder, carbon dioxide or other extinguishing medium appropriate to existing fires. Breathing apparatus must be worn.

6. ACCIDENTAL RELEASE MEASURE

Collect spillage avoiding the spread of dust. If present in solution soak up in inert granular absorbent or rags. Dispose in accordance with Sections 13. Vacuum clean or wash area thoroughly with detergent and water.

7. HANDLING AND STORAGE

Sensible precautions should be taken to avoid contact with the eyes and skin, inhalation of dust or accidental ingestion.
Observe strict cleanliness and personal hygiene at all times.

NATRApHASE[®] NP20ATP is a combustible powder and there is a danger of dust explosion. Equipment must be fully earthed to prevent accumulation of static electricity and other sources of ignition must be avoided. Avoid dust formation.

Store in the original, sealed container in a dry place at, or below, room temperature. Suitable materials for equipment are stainless steel, aluminium, enamel, glass or good-approved plastic.

“Date of manufacture” and “Use by Date” dates are shown on each product label. For general planning purposes allow maximum storage period of six (6) months from date of delivery.

8. EXPOSURE, CONTROL AND PERSONAL PROTECTION

An official occupation exposure limit for NATRApHASE[®] NP20ATP has not been established but the recommended limited time working weighted average 8 hour working day is 10.00mg/m³ (nuisance dust only).

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. For unavoidable dusty operations an approved dust mask or positive respirator must be worn and the eyes protected with safety goggles or the respirator face piece.

9. PHYSICAL AND CHEMICAL PROPERTIES

Taste: Sweetish
Smell: Slight odour
Molecular Mass: Not relevant – mixture
Bulk Density: About 0.9 kg/litre
Solubility: Soluble in oils, fats. Dispersible in water at 20°C

10. STABILITY AND REACTIVITY

Product from humidity, light and heat for quality reasons. Since its functions in foods are to react with active oxygen during storage it is **incompatible** with oxidising agents (particularly peroxides) ferric and silver salts.

11. TOXICOLOGICAL INFORMATION

All the ingredients in NATRApHASE[®] NP20ATP are food grade materials and generally regarded as safe (GRAS Certified) for human and animal consumption.

Pure Natural Ascorbyl Palmitate:

Acute Toxicity: LD₅₀>10,000 mg/kg
Local effects: May cause irritation of eyes and mucous membranes.
Special effects: Not mutagenic (Ames-test)

Pure Natural Tocopherol:

Acute Toxicity: LD₅₀>5,000 mg/kg
Excessive oral intake can cause headache fatigue, weakness, digestive disturbances and nausea. Prolonged and intensive skin contact may lead to erythema and dermatitis.
Local effects: No eye irritation, skin irritation, oxidation products irritate skin.
Special effects: Not mutagenic (Ames-test), not phototoxic.

Pure Citric Acid:

Acute Toxicity: LD₅₀>5,000 mg/kg
Local effects: Severe eye irritation, moderate skin irritation.
Special effects: Not mutagenic (Ames-test), not teratogenic.

12. ECOLOGICAL INFORMATION

Biodegradable: NATRApHASE[®] NP20ATP is not expected to result in any persisting environmental influence.

13. DISPOSAL CONSIDERATION

Small quantities may be disposed with general waste. Larger amounts must be disposed in accordance with The Special Waste Regulations at a licensed incinerator or landfill site.

14. TRANSPORT INFORMATION

Not classified as hazardous for transport

15. REGULATORY INFORMATION

d-α-Tocopherol and Ascorbyl Palmitate, the antioxidant ingredients of NATRApHASE[®] NP20ATP are non GMO permitted food antioxidants according to EU regulations 1829/2003 and 1830/2003.

When added to food or drink their presence must be declared on the product label. A suitable declaration might be:-

Either Antioxidants – Ascorbyl Palmitate; d-a-Tocopherol
Or Antioxidants – E304 (i); E307

Citric Acid is a permitted acidifier with EU and UK regulations. Whilst it may be declared on a product label (Acidifier – Citric Acid; or Acidifier – E330) it is arguable that it is a technological additive which has no function in the final product and therefore need not be declared. Similarly Glycerol Monostearate is an accepted emulsifier included for a technological purpose which is largely irrelevant to the final food product and need not be declared.

NATRApHASE[®] NP20ATP is supplied for use in food recipes/processing and is not for retail sale. It is therefore labelled in accordance with EC regulation 67/548/CEE and 1999/45/CE of the Food Additives Labelling Regulations 1999.

16. INFORMATION ON USE

Uses: As an antioxidant/preservative for use in food recipes and processing
Pack Size 25kg sealed poly lined carton. Supplied in minimum 1000kg shrink wrapped palletized quantities.
Country of Origin: United Kingdom