



גדות תעשיות ביוכימיה בע"מ
Gadot Biochemical Industries Ltd.

Tri Potassium Citrate

Monohydrate FCC/USP/EP/BP

Description:

Tri Potassium Citrate Monohydrate is a white crystalline product.

General Characteristics:

Formula:	$C_6H_5K_3O_7 \cdot H_2O$
Molecular weight:	324.42
Appearance:	White crystals
Taste:	Saline taste
Odor:	Practically odorless
Solubility (gr./100 ml at 25°C):	In water - 154 In ethanol - Insoluble
CAS Number:	6100-05-6
EINECS No.:	212-755-5
E-Number:	E-332

Standard Specifications:

Gadot's Tri Potassium Citrate Monohydrate meets the standards of the Food Chemical Codex, the United States Pharmacopoeia, the National Formulary (N.F), the British Pharmacopoeia, and the European Pharmacopoeia. The product complies with the European directive EC 231/2012 in the latest version.

<u>Identification</u>	<u>Meets FCC/USP/EP/BP/NF tests</u>
Assay (anhydrous basis)	99.0-100.5%
Loss on drying (4 hrs. at 180°C)	4.0-6.0%
Alkalinity	Passes test
Tartarate	Passes test
Readily carbonizable substances	Passes test
Color of solution (40% w/v)	98% min. (%T in 420 nm)
Clarity of solution (40% w/v)	4 NTU max.
Oxalate	100 ppm max.
Arsenic (as As)	0.5 ppm max.
Heavy metals (as Pb)	5 ppm max.
Lead	0.5 ppm max.
Sodium	0.3% max.
Iron	5 ppm max.
pH (5% solution)	7.5-9.0
Chloride	50 ppm max.
Sulphate	150 ppm max
Mercury	0.1 ppm max
Cadmium	0.5 ppm max.



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Organic Volatile Impurities

Gadot's Tri Potassium Citrate Monohydrate contains no tridodecylamin nor any polynuclear hydrocarbons or volatile organic impurities. These compounds are not used in the manufacturing process of the above product and if tested they will comply with the required specified limits of U.S.P, N.F and E.P.

<u>Impurities</u>	<u>Limit</u>
Benzene	2 PPM
Carbon tetrachloride	4 PPM
1,2 - Dichloroethane	5 PPM
1,1 – Dichloroethene	8 PPM
Chloroform	60 PPM
1,4 - Dioxane	380 PPM
Ethylen Oxide	10 PPM
Methylen Chloride	600 PPM
Tri Chloroethylene	80 PPM

Nutritional Values:

<u>Nutrient</u>	<u>Nutrient Quantity</u>
Protein (dairy derived)	- None
Carbohydrates	- None
Fat	- None
Potassium	- 35.2% - 36.5%
Vitamin A	- None
Vitamin C	- None
Thiamin	- None
Riboflavin	- None
Niacin	- None
Calcium	- 30 mg/kg
Iron	- < 5 mg/kg
Vitamin D	- None
Vitamin B-6	- None
Vitamin B-12	- None
Phosphorus	- None
Magnesium	- 1 mg/kg
Zinc	- None
Pantotenic Acid	- None
Sodium	- 3,000 mg/kg
Artificial colors	- product does not contain artificial color
Caloric value	- 146.2 Kcal/100 gr

Allergens:

Gadot's Tri Potassium Citrate doesn't contain any food allergens according to annex 3a of EU directive 2003/89.



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Standard Granulation:

Grade	USS Sieve	Microns	
Regular Granular	On No. 16	> 1190	0% max.
	Through No. 100	< 150	10% max.
Standard Granular	On No. 16	> 1190	0% max.
	Through No. 50	< 300	10% max.
Fine Granular	On No. 30	> 590	5% max.
	Through No. 100	< 150	10% max.

Other requirements:

Foreign Bodies: In compliance with the FDA/ORA compliance policy guide section 555.425.

BSE/TSE

No raw materials from bovine origin are used nor are any bovine constituents present in the product.

Hormones and Antibiotics

No antibiotics or hormones are present in the product.

Mycotoxines:

Total Aflatoxines - less than 4 ppb
Aflatoxins B1 - less than 2 ppb
Aflatoxins M1 - less than 0.05 ppb

Pesticides and Insecticides:

Complies with United States and European food health regulations.

GMO - Status:

The product is a non GMO product and is free from any recombinant DNA technology involvement.



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Irradiation / Radioactivity:

Gadot's Tri Potassium Citrate was never subjected to any kind of ionized irradiation and contains no radioactivity not even in minor amounts.

Microbiological Specification:

Total viable count	-	500 CFU/gr max.
Yeasts & Molds	-	20 CFU/gr max.
E. Coli	-	Absent in 10 gr
Staphylococcus Aureus	-	Absent in 10 gr
Pseudomonas Aeruginosa	-	Absent in 10 gr
Salmonella	-	Absent in 25 gr
Coliforms	-	10 CFU/gr max.
Listeria Monocytogenes	-	Absent in 25 gr.

Main Uses:

- Replaces Tri Sodium Citrate, whenever required to reduce the sodium content.
- Used in the cheese and beverage industry, as well as for the production of jam and juices.
- Not for use in the preparation of injectable solutions.

Packaging:

25 kg. or 50 lb. polyethylene-lined multi-wall paper bags, palletized and stretch-wrapped. Big bags and other packaging available on request.
All packaging materials used are suitable for food applications according to FDA and EU regulations.

Expiry Date:

Tri Potassium Citrate Monohydrate has a shelf life of two years from production date. The production date is printed on the bags.



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Kosher&Halal:

Tri Potassium Citrate Monohydrate produced by Gadot is strictly Kosher and Halal. Kosher and Halal certificates are available upon request.

Vegetarians / Vegans:

Tri Potassium Citrate produced by Gadot is suitable for consumption by vegetarians and vegans.

ISO 9000:

Gadot is ISO-9001 : 2008 certified.

HACCP:

Gadot Biochemical Industries Ltd. Food Safety Management System - HACCP comply with:

1. CODEX ALIMENTARIUS – Annex to CRC/RCP – 1969 Rev.3 (1997).
2. Health Ministry Guide for HACCP, March 2002 Edition.

GMP:

Gadot Biochemical Industries is GMP certified.

Gadot manufacture its Tri Potassium Citrate Monohydrate under strict supervision and full compliance with all GMP rules, and therefore permitted to label it's product with official GMP symbol as laid down in the public health regulations.

Storage and Transport Recommendations:

Store in a cool, dry place.

Updated: December 3 , 2015