



גדות תעשיות ביוכימיה בע"מ
Gadot Biochemical Industries Ltd.

Magnesium Citrate 16%

Description:

A highly bioavailable source of Magnesium for food fortification.

General Characteristics:

Formula:	modification on $Mg_3(C_6H_5O_7)_2 \cdot 9H_2O$
Appearance:	White crystalline powder
Odor:	Practically odorless
Solubility:	Slightly soluble in water
CAS Number:	3344-18-1

Standard Specifications:

Gadot's Magnesium Citrate 16% is tested according to the United States Pharmacopoeia standard methods.

<u>Identification</u>	<u>Meets USP</u>
Assay (as Mg)	16% min.
Identification	meets USP tests
Loss on drying	20% - 24%
Chlorides	500 ppm max.
Sulphate	0.2% max.
Calcium	1% max.
Iron	200 ppm max.
Lead	0.5 ppm max.
Heavy metals	5 ppm max.

Organic Volatile Impurities

Gadot's Magnesium Citrate 16% 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.

<u>Impurities</u>	<u>Limit</u>
Benzene	100 PPM
Chloroform	50 PPM
1,4 Dioxane	100 PPM
Ethylene Oxide	10 PPM
Methylene Chloride	100 PPM
Trichloroethylene	100 PPM



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Nutritional Values:

<u>Nutrient</u>		<u>Nutrient quantity</u>
Protein	-	none
Carbohydrates	-	none
Fat	-	None
Vitamin A	-	None
Vitamin C	-	None
Thiamin	-	None
Riboflavin	-	None
Niacin	-	None
Magnesium	-	16% min.
Vitamin D	-	None
Vitamin B-6	-	None
Vitamin B-12	-	None
Heavy metals	-	5 ppm max.
Lead	-	0.5 ppm max.
Fluoride	-	30 ppm max.
Caloric Value	-	133 Kcal/100 gr.
Artificial colors	-	product does not contain artificial color

Allergens:

Gadot's Magnesium Citrate 16% doesn't contain any food allergens according to annex 3a of EU directive 2003/89.

Standard Granulation:

Regular: 10% max bigger than 50 micron.

Particle size distribution is analyzed by laser diffraction after ultrasonic treatment of sample.

Other requirements:

No foreign bodies present in the product.

BSE/TSE

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



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Hormones and Antibiotics

No antibiotics or hormones are present in the product.

Mycotoxines:

Total Aflatoxines	- less than 15 ppb
Aflatoxins B1	- less than 5 ppb
Aflatoxins M1	- less than 0.05 ppb

Insecticides:

Complies with food health regulations.

GMO - Status:

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

Irradiation / Radioactivity:

Gadot's Magnesium Citrate 16% 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.
Yeast & 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:

- Food fortification..
- Dietary supplements.



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Packaging:

25 kg. or 50 lb. polyethylene-lined multi-wall paper bags, palletized and stretch-wrapped. Big bags and other packaging available on request.

Expiry Date:

Magnesium Citrate 16% has a shelf life of two years from production date. The production date is printed on the bags.

Kosher:

Magnesium Citrate 16% produced by Gadot is strictly Kosher. Kosher certificates are available upon request.

Vegetarians / Vegans:

Magnesium Citrate 16% produced by Gadot is suitable for consumption by vegetarians and vegans.

ISO 9000:

Gadot is ISO-9001 : 2000 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. DS – 3027E: 1998
3. Health Ministry Guide for HACCP, March 2002 Edition.

GMP:

Gadot Biochemical Industries is GMP certified.

Gadot manufacture its Magnesium Citrate 16% 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 Recommendations:

Store in a cool and dry place.

Updated: August 23rd, 2005