



Tomita Pharmaceutical Co., Ltd.

MANUFACTURER OF CHEMICALS & PHARMACEUTICALS

85-1, Maruyama, Akinokami, Seto-cho, Naruto, Tokushima 771-0360, Japan phone: +81-88-688-0511 fax: +81-88-688-0565

Certificate of Analysis

Apr. 16, 2009

U. S. P.
Magnesium Oxide Heavy
Fine Granular (S)
CAS. REG. NO. 1309-48-4

	Standard Specifications	Analysis Results
Identification	; Meets test	; Meets test
Loss on ignition	; 10.0 % max.	; 1.2 %
Free alkali	; 2.0 mL max. (0.10N-H ₂ SO ₄)	; Meets test
& soluble salts	; 2.0 % max. (10 mg max.)	; 1.6 % (8 mg)
Acid-insoluble substances	; 0.1 % max.	; 0.04 %
Limit of calcium	; 1.1 % max.	; 0.3 %
(Calcium oxide)		; (0.4 %)
Heavy metals	; 20 μg/g max.	; 20 μg/g max.
(Lead)		; 0.52 ppm
Iron	; 0.05 % max.	; 0.05 % max.
Bulk density (0.70-1.50 g/mL)		; 1.02 g/mL
Assay (after ignition)		
Magnesium oxide	; 96.0 ~ 100.5 %	; 96.6 %
(Magnesium)		; (58.3 %)
Particle size		
28 mesh on		; 0.0 %
28 ~ 42 mesh		; 47.2 %
42 ~ 80 mesh		; 48.8 %
80 mesh pass		; 4.0 %
(30 ~ 80 mesh 90% min. guaranteed)		

Quantity 10000 kg

Date of Manufacturing : Apr. 6, 2009

Expiry Date : Apr. 5, 2012

Country of Origin is Japan

Analyzed by

Makoto Katayama
(Chief Analyst)

Checked by

Takashi Imura
(Quality Control Manager)

Tokyo Office 2-7-6, Uchikanda, Chiyoda-ku, Tokyo 101-0047, Japan
 Osaka Office 1-7-4, Nishitenma, Kita-ku, Osaka 530-0047, Japan
 Nagoya Office 3-23-13, Meieki, Nakamura-ku, Nagoya, Aichi 450-0002, Japan
 Head Office 85-1, Maruyama, Akinokami, Seto-cho, Naruto, Tokushima 771-0360, Japan

phone: +81-3-3252-4032 fax: +81-3-3252-4039
 phone: +81-6-6364-3431 fax: +81-6-6364-6109
 phone: +81-52-563-1631 fax: +81-52-563-1632
 phone: +81-88-688-0511 fax: +81-88-688-0565



Tomita Pharmaceutical Co., Ltd.

MANUFACTURER OF CHEMICALS & PHARMACEUTICALS

85-1, Maruyama, Akinokami, Seto-cho, Naruto, Tokushima 771-0360, Japan phone: +81-88-688-0511 fax: +81-88-688-0565

Certificate of Analysis

Sep. 9, 2009

U. S. P.
Magnesium Oxide Heavy
Fine Granular (S)
CAS. REG. NO. 1309-48-4

Standard Specifications		Analysis Results	
Identification	; Meets test	; Meets test	
Loss on ignition	; 10.0 % max.	; 0.8 %	
Free alkali & soluble salts	; 2.0 mL max. (0.10N-H ₂ SO ₄) ; 2.0 % max. (10 mg max.)	; Meets test ; 1.8 % (9 mg)	
Acid-insoluble substances	; 0.1 % max.	; 0.07 %	
Limit of calcium (Calcium oxide)	; 1.1 % max.	; 0.4 % (0.5 %)	
Heavy metals (Lead)	; 20 μg/g max.	; 20 μg/g max. ; 0.71 ppm	
Iron	; 0.05 % max.	; 0.05 % max.	
Bulk density (0.70-1.50 g/mL)		; 1.02 g/mL	
Assay (after ignition)			
Magnesium oxide (Magnesium)	; 96.0 ~ 100.5 %	; 96.6 % (58.3 %)	
Particle size			
28 mesh on		; 0.0 %	
28 ~ 42 mesh		; 42.8 %	
42 ~ 80 mesh		; 53.4 %	
80 mesh pass		; 3.8 %	
(30 ~ 80 mesh 90% min. guaranteed)			

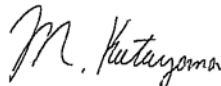
Quantity 8000 kg

Date of Manufacturing : Sep. 4, 2009


Expiry Date : Sep. 3, 2012

Country of Origin is Japan

Analyzed by


Makoto Katayama
(Chief Analyst)

Checked by


Takashi Imura
(Quality Control Manager)

Tokyo Office 2-7-6, Uchikanda, Chiyoda-ku, Tokyo 101-0047, Japan
Osaka Office 1-7-4, Nishitenma, Kita-ku, Osaka 530-0047, Japan
Negoya Office 3-23-13, Meieki, Nakamura-ku, Nagoya, Aichi 450-0002, Japan
Head Office 85-1, Maruyama, Akinokami, Seto-cho, Naruto, Tokushima 771-0360, Japan

phone : +81-3-3252-4032 fax : +81-3-3252-4039
phone : +81-6-6364-3431 fax : +81-6-6364-6109
phone : +81-52-563-1631 fax : +81-52-563-1632
phone : +81-88-688-0511 fax : +81-88-688-0565



Tomita Pharmaceutical Co., Ltd.

MANUFACTURER OF CHEMICALS & PHARMACEUTICALS

85-1, Maruyama, Akinokami, Seto-cho, Naruto, Tokushima 771-0360, Japan phone: +81-88-688-0511 fax: +81-88-688-0565

Certificate of Analysis

July 21, 2008

U. S. P.
Magnesium Oxide Heavy
Fine Granular (S)
CAS. REG. NO. 1309-48-4

Standard Specifications		Analysis Results	
Identification	; Meets test	; Meets test	
Loss on ignition	; 10.0 % max.	; 0.5 %	
Free alkali	; 2.0 mL max. (0.10N-H ₂ SO ₄)	; Meets test	
& soluble salts	; 2.0 % max. (10 mg max.)	; 1.0 % (5 mg)	
Acid-insoluble substances	; 0.1 % max.	; 0.05 %	
Limit of calcium	; 1.1 % max.	; 0.5 %	
(Calcium oxide)		; (0.7 %)	
Heavy metals	; 20 μg/g max.	; 20 μg/g max.	
(Lead)		; 0.25 ppm	
Iron	; 0.05 % max.	; 0.05 % max.	
Bulk density (0.33-1.50 g/mL)		; 1.09 g/mL	
Assay (after ignition)			
Magnesium oxide	; 96.0 ~ 100.5 %	; 97.2 %	
(Magnesium)		; (58.6 %)	
Particle size			
28 mesh on		; 1.2 %	
28 ~ 42 mesh		; 16.1 %	
42 ~ 80 mesh		; 78.6 %	
80 mesh pass		; 4.1 %	
(30 ~ 80 mesh 90% min. guaranteed)			

Quantity 17000 kg

Date of Manufacturing : July 14, 2008

Expiry Date : July 13, 2011

Analyzed by

Makoto Katayama
(Chief Analyst)

Checked by

Takashi Imura
(Quality Control Manager)

Tokyo Office 2-7-6, Uchikanda, Chiyoda-ku, Tokyo 101-0047, Japan

phone: +81-3-3252-4032 fax: +81-3-3252-4039

Osaka Office 1-7-4, Nishitenma, Kita-ku, Osaka 530-0047, Japan

phone: +81-6-6364-3431 fax: +81-6-6364-6109

Nagoya Office 3-23-13, Meieki, Nakamura-ku, Nagoya, Aichi 450-0002, Japan

phone: +81-52-563-1631 fax: +81-52-563-1632

Head Office 85-1, Maruyama, Akinokami, Seto-cho, Naruto, Tokushima 771-0360, Japan

phone: +81-88-688-0511 fax: +81-88-688-0565