

Global Headquarters:
Avantor, Inc.
100 Matsonford Rd., Suite 200
Radnor, PA 19087 USA
www.avantorsciences.com

Packaging site: Avantor Performance Materials India Private Limited Plot No.1, GIDC, Panoli, Ankleshwar Gujarat Pin: 394116, India

# Magnesium Sulphate Heptahydrate

## **Product Regulatory Data Sheet**

#### Section 1 – Product Information

#### **Products Covered**

Brand	Product code	Product Description	MOC* code
Macron Fine Chemicals™	7506	Magnesium Sulphate Heptahydrate, Multi- Compendial	R
Macron Fine Chemicals™ Macron Fine Chemicals™	7508 7503	Magnesium Sulphate Heptahydrate, ChP Magnesium Sulphate Heptahydrate, IP	R RL
		i i i gi i i i i i i i i i i i i i i i	

\*MOC = Management of Change

#### Section 2 – Manufacturing, Packaging and Release Site Information

The product code 7506 and 7508 listed in Section 1 is manufactured under current Good Manufacturing Practices (cGMPs) as set forth by ICH Q7 and International Pharmaceutical Excipients Council (IPEC) guidelines.

The product code 7503 in Section 1 is manufactured in India with IP monographs are manufactured under current Good Manufacturing Practices (cGMPs) as set forth by the Drugs and Cosmetics Rule, 1945, Government of India Ministry of Health and Family Welfare.

A number of the cGMP produced products that are sold by Avantor Performance Materials, LLC. may not be originally manufactured at our sites. However, we perform the analytical and stability testing for these products and repackage the products where applicable. With ISO and cGMP procedures in place at our facilities we can ensure, and take complete responsibility for, the traceability and quality of the finished, packaged product that we offer.

## Section 3 – Physical/Chemical Information

CAS #: 10034-99-8

**Manufacturing Process:** Synthesis. Additional manufacturing process information may be disclosed under NDA upon request from the support contact in Section 7.

#### Raw Material Origin: Chemical

## Section 4 – Regulatory Information

**DMF:** Avantor may hold Master File(s) for specified product codes, dependent on the country of interest. Inquire with the support contact in Section 7 for additional details.

BSE/TSE Status: The subject materials are manufactured from raw materials that contain NO animal parts, products, and/or by-products nor do they come in contact with animal parts, products, and/or by-products.

Allergen/Hypersensitivities Information: To the best of our knowledge, the allergens listed in the US FDA, EU Directive 2003/89/EC, and TGO-91/92 are not known additives, by products, intermediate parts, or otherwise intentionally added during the manufacturing processes of the product.

According to the Original Manufacturer, the products listed in Section 1 do not contain latex, gluten, aspartame, antibiotics, benzoates (including benzoic acid, sodium benzoate), crustacean crab, crayfish, lobster, prawn and



shrimp, egg, ethanol, fish and fish products, galactose, hydroxybenzoic esters, lactose, milk and milk products, Peanut (Arachis Hypogea), Walnut (Juglans nigra), Almond oil, Macadamia nut oil, Prunus dulis, Phenylalanine, Pollen propolis or royal jelly, Potassium and Sodium salts, Saccharin, Soy and soy products, sorbates, sucralose, sugars(fructose, glucose, honey, invert sugar, lactose, maltose, and sucrose), sulfites, tartrazine, sesame seeds and sesame seeds products are not known additives, by-products, intermediate parts, or otherwise intentionally added during the manufacturing processes of the product.

Avantor does not produce any of the following types of products: antibiotics, aflatoxins, penicillin, semi-synthetic penicillins, cephalosporins, other beta-lactams, cytotoxics, steroids, medicated feeds, or pesticides.

This product is manufactured using cGMP guidelines which provide controls that allow no potential for cross contamination of any allergens or other contaminants. However, this product is not tested for the presence of these or any other allergens by Avantor or the Original Manufacturer, therefore, we do not have confirmation for the absence of any allergens in the product.

**GMO Information:** The subject materials, including any raw materials and processing aids, are NOT subject to genetic modification.

Residual Solvents/Organic Volatile Impurities (OVI) Information: The subject materials (all lots) comply with the requirements of the ICH Q3C Residual Solvents Guideline and USP<467> Residual Solvents. No Class 1, 2, 3 or other solvents are used or produced in the manufacturing or purification of the materials.

Elemental Impurities: Please see attached summary for Elemental Impurity information for these products.

Halal Status: For J.T.Baker® and Macron Fine Chemicals™ brand products, kosher certification is aligned to the Avantor packaging site as indicated on the product Certificate of Analysis. Please refer to the site-specific kosher certificate available on AskAvantor for our most up to date listing of kosher products at (www.askavantor.com Keyword: kosher).

**Kosher Status:** For J.T.Baker® and Macron Fine Chemicals<sup>™</sup> brand products, halal certification is aligned to the Avantor packaging site as indicated on the product Certificate of Analysis. Please refer to the site-specific halal certificate available on AskAvantor for our most up to date listing of halal products at (www.askavantor.com Keyword: halal).

**GRAS Status:** The United States Food and Drug Administration (FDA) have acknowledged that some chemicals may be considered Substances Generally Recognized as Safe (GRAS) in foods when used in accordance with the requirements and limitations per specific 21 CFR regnums. For the latest information on whether or not an Avantor product is considered GRAS, please visit the Electronic Code of Federal Regulations.

## Section 5 – Miscellaneous Product Information

Certificate of Analysis Date Format: The Manufactured Date and Expiration/Retest Date on the Certificate of Analysis are reported as YYYY-Xyz-DD. For example, the Manufactured Date for October 1, 2021 would be reported as 2021-Oct-01.

For J.T.Baker® and Macron Fine Chemicals<sup>™</sup> brand products, please refer to Ask Avantor for information concerning our lot/batch numbering system. (<u>www.askavantor.com</u> Keyword: Lot Number).

**Batch Definition**: A "batch" is a homogeneous unit of production; each batch of is from one single batch of the source supplier.

Shelf-Life Information: If a product has an assigned expiration or retest period, the date will appear on the Certificate of Analysis. For products that do not have assigned dates, please reach out to the support contact in Section 7 for additional stability inquiries.

Management of Change: For J.T.Baker® and Macron Fine Chemicals™ brand products, please refer to Management of Change link under the Working with Avantor tab on the Avantor website.

**Country of Origin Statement:** Country of Origin is indicated on the product Certificate of Analysis. If you require further documentation, please reach out to the Trade Compliance support contact in Section 7.



**Storage Requirement:** Please refer to the product's Certificate of Analysis or Product Specifications. In the absence of specific storage conditions listed on its specification sheet or Certificate of Analysis, products are to be stored in ambient conditions of temperature and humidity. We do not formally tie any specific temperature or humidity range with the "ambient" storage designation, but an example of a common temperature interpretation is 15-30°C. Our products are also packaged to protect from the normal variation in humidity during storage and shipment. Further handling and storage information may be found in Section 7 of the product's SDS sheet.

**Certificates of Analysis:** For J.T.Baker® and Macron Fine Chemicals<sup>™</sup> brand products, please see the current list of product specifications using the Certificate/SDS Search tool on our website <u>here</u>.

**Safety Data Sheet:** For J.T.Baker® and Macron Fine Chemicals™ brand products, please see the current product safety information using the Certificate/SDS Search tool on our website <u>here</u>.

Avantor Site Certifications: Please see the current Avantor site certifications on our website here.

**Site Quality Overview**: Avantor maintains a self-assessment modeled after IPEC guidelines which describes site and quality system information to support the manufacturing activities of this product. Please reach out to the support contact in Section 7 for a current copy of the Site Quality Overview.

**Packaging Information:** Please reach out to the support contact in Section 7 for current packaging specifications.

### Section 6 - Revision History

Rev. 0; Jun 03, 2020: IPEC EIP Format (MK)

Rev. 1; Sep 13, 2023: Entire Document- Updated to new template. Verbiage was updated to new formats, but the quality of the product and its statements has not changed unless otherwise noted in this revision history. Section 1: Corrected MOC code for 7503 from MOC R to RL in accordance with Panoli site. This was a typographical error and not a change to the product's MOC code; Section 4: Removed Compendial Compliance statement. Removed Regulatory email from DMF statement. Specified certificate availability for different branded products for Kosher and Halal Status statements. Generalized GRAS Status statement; Section 5: Updated COA Date format statement, Batch Description, Country of Origin Statement, Shelf-Life Information, and Management of Change statements. Added Certificates of Analysis, Safety Data Sheet, Avantor Site Certifications, Site Quality Overview, and Packaging Information statements; Section 7: Added contacts. (SP)

This electronic document is valid without a signature.

## Section 7 – Contact Information

# <u>Technical Service</u>

Phone: 1-855-282-6867 and 1-610-573-2600 (outside U.S.), select option 5

Email: <u>Technical.Service@avantorsciences.com</u>

**Regulatory Support** 

Email: regulatory.support@avantorsciences.com

<u>Trade Compliance</u>

Rev. 1; Sep 13, 2023

Email: Trade.Compliance@avantorsciences.com

While the above information is provided in good faith and believed to be accurate as of the date provided, Avantor Performance Materials ("Avantor") makes no representations or warranties as to the accuracy or completeness of such information. All Avantor products are subject to Avantor's terms and conditions of sale including the limitations of liability contained therein and any contrary terms and conditions are expressly rejected. As Avantor has no control over purchasers' uses of its products, Avantor expressly disclaims all liability with respect to same.



The most current revision of this document is maintained on our website. Reviews and revisions are performed as warranted due to product changes or as part of the supplier audit cycle.

Trademarks are owned by Avantor Performance Materials, LLC. or its affiliates unless otherwise noted. 2020 Avantor Performance Materials, LLC



Avantor Performance Materials India Ltd. Plot No.1, GIDC, Panoli, Ankleshwar Gujarat Pin:394116, India

Material Name: Magnesium Sulfate Heptahydrate

Product Code: 7506, 7503, 7508

Source/Type of Excipient: ☐ Mineral; ☐Mineral Derived; ☐ Plant; ☐Plant Derived; ☐Synthetic; ☐Fermentation Derived;

Other (explain):

Elemental Impurity identify the Expected concentration/u of Quantification if available) source of information number of lots tested frequency of testing.	Other (explain).								
Cadmium         Cd         1         Yes □         No ☒         Unknown □         <0.0005 ppm         ICPOES (0.0005 ppm)         Avg. of 3 batches           Mercury         Hg         1         Yes □         No ☒         Unknown □         0.087 ppm         ICPOES (0.006 ppm)         Avg. of 3 batches           Lead         Pb         1         Yes □         No ☒         Unknown □         0.026 ppm         ICPOES (0.01 ppm)         Avg. of 3 batches           Cobalt         Co         2A         Yes □         No ☒         Unknown □         0.110 ppm         ICPOES (0.004 ppm)         Avg. of 3 batches           Nickel         Ni         2A         Yes □         No ☒         Unknown □         1.026 ppm         ICPOES (0.004 ppm)         Avg. of 3 batches           Vanadium         V         2A         Yes □         No ☒         Unknown □         <0.015 ppm			Class	Likely to be present			identify the Expected concentration/u	•	Comments regarding source of information (i.e; number of lots tested, frequency of testing; process understanding etc.)
Mercury         Hg         1         Yes □         No ☒         Unknown □         0.087 ppm         ICPOES (0.006 ppm)         Avg. of 3 batches           Lead         Pb         1         Yes □         No ☒         Unknown □         0.026 ppm         ICPOES (0.01 ppm)         Avg. of 3 batches           Cobalt         Co         2A         Yes □         No ☒         Unknown □         0.110 ppm         ICPOES (0.004 ppm)         Avg. of 3 batches           Nickel         Ni         2A         Yes □         No ☒         Unknown □         1.026 ppm         ICPOES (0.006 ppm)         Avg. of 3 batches           Vanadium         V         2A         Yes □         No ☒         Unknown □         <0.015 ppm	Arsenic	As	1	Yes□	No⊠	Unknown □	0.03 ppm	ICPOES (0.02 ppm)	Avg. of 3 batches
Lead         Pb         1         Yes□         No ☒         Unknown□         0.026 ppm         ICPOES (0.01 ppm)         Avg. of 3 batches           Cobalt         Co         2A         Yes□         No ☒         Unknown□         0.110 ppm         ICPOES (0.004 ppm)         Avg. of 3 batches           Nickel         Ni         2A         Yes□         No ☒         Unknown□         1.026 ppm         ICPOES (0.006 ppm)         Avg. of 3 batches           Vanadium         V         2A         Yes□         No ☒         Unknown□         0.015 ppm         ICPOES (0.002 ppm)         Avg. of 3 batches           Silver         Ag         2B         Yes□         No ☒         Unknown□         <0.0009 ppm	Cadmium	Cd	1	Yes□	No⊠	Unknown □	<0.0005 ppm	ICPOES (0.0005 ppm)	Avg. of 3 batches
Cobalt         Co         2A         Yes □         No ☒         Unknown □         0.110 ppm         ICPOES (0.004 ppm)         Avg. of 3 batches           Nickel         Ni         2A         Yes □         No ☒         Unknown □         1.026 ppm         ICPOES (0.006 ppm)         Avg. of 3 batches           Vanadium         V         2A         Yes □         No ☒         Unknown □         0.015 ppm         ICPOES (0.002 ppm)         Avg. of 3 batches           Silver         Ag         2B         Yes □         No ☒         Unknown □         <0.0009 ppm	Mercury	Hg	1	Yes□	No 🗵	Unknown □	0.087 ppm	ICPOES (0.006 ppm)	Avg. of 3 batches
Nickel         Ni         2A         Yes □         No ☒         Unknown □         1.026 ppm         ICPOES (0.006 ppm)         Avg. of 3 batches           Vanadium         V         2A         Yes □         No ☒         Unknown □         0.015 ppm         ICPOES (0.002 ppm)         Avg. of 3 batches           Silver         Ag         2B         Yes □         No ☒         Unknown □         <0.0009 ppm	Lead	Pb	1	Yes□	No 🗵	Unknown □	0.026 ppm	ICPOES (0.01 ppm)	Avg. of 3 batches
Vanadium         V         2A         Yes □         No ☒         Unknown □         0.015 ppm         ICPOES (0.002 ppm)         Avg. of 3 batches           Silver         Ag         2B         Yes □         No ☒         Unknown □         <0.0009 ppm	Cobalt	Со	2A	Yes□	No⊠	Unknown □	0.110 ppm	ICPOES (0.004 ppm)	Avg. of 3 batches
Silver         Ag         2B         Yes □         No ☒         Unknown □         <0.0009 ppm         ICPOES (0.0009 ppm)         Avg. of 3 batches           Gold         Au         2B         Yes □         No ☒         Unknown □         0.17 ppm         ICPOES (0.002 ppm)         Avg. of 3 batches           Iridium         Ir         2B         Yes □         No ☒         Unknown □         <0.004 ppm	Nickel	Ni	2A	Yes□	No⊠	Unknown □	1.026 ppm	ICPOES (0.006 ppm)	Avg. of 3 batches
Gold         Au         2B         Yes □         No ☒         Unknown □         0.17 ppm         ICPOES (0.002 ppm)         Avg. of 3 batches           Iridium         Ir         2B         Yes □         No ☒         Unknown □         <0.004 ppm	Vanadium	V	2A	Yes□	No ⊠	Unknown □	0.015 ppm	ICPOES (0.002 ppm)	Avg. of 3 batches
Iridium       Ir       2B       Yes □       No ☒       Unknown □       <0.004 ppm       ICPOES (0.004 ppm)       Avg. of 3 batches         Osmium       Os       2B       Yes □       No ☒       Unknown □       <0.002 ppm	Silver	Ag	2B	Yes□	No⊠	Unknown □	<0.0009 ppm	ICPOES (0.0009 ppm)	Avg. of 3 batches
Osmium Os 2B Yes□ No⊠ Unknown□ <0.002 ppm ICPOES (0.002 ppm) Avg. of 3 batches	Gold	Au	2B	Yes□	No⊠	Unknown □	0.17 ppm	ICPOES (0.002 ppm)	Avg. of 3 batches
	Iridium	lr	2B	Yes□	No ⊠	Unknown □	<0.004 ppm	ICPOES (0.004 ppm)	Avg. of 3 batches
Palladium Pd 2B Yes□ No⊠ Unknown□ <0.003 ppm ICPOES (0.003 ppm) Avg. of 3 batches	Osmium	Os	2B	Yes□	No ⊠	Unknown □	<0.002 ppm	ICPOES (0.002 ppm)	Avg. of 3 batches
	Palladium	Pd	2B	Yes□	No ⊠	Unknown □	<0.003 ppm	ICPOES (0.003 ppm)	Avg. of 3 batches



Elemental Impurity Class		Class	Likely to be present			If known, please identify the Expected concentration/unit (or range)	Analytical Method used (Limit of Quantification if available)	Comments regarding source of information (i.e; number of lots tested, frequency of testing; process understanding etc.)
Platinum	Pt	2B	Yes□	No⊠	Unknown □	<0.02 ppm	ICPOES (0.02 ppm)	Avg. of 3 batches
Rhodium	Rh	2B	Yes□	No⊠	Unknown □	<0.008 ppm	ICPOES (0.008 ppm)	Avg. of 3 batches
Ruthenium	Ru	2B	Yes□	No⊠	Unknown □	0.104 ppm	ICPOES (0.006 ppm)	Avg. of 3 batches
Selenium	Se	2B	Yes□	No⊠	Unknown □	0.145 ppm	ICPOES (0.03 ppm)	Avg. of 3 batches
Thallium	TI	2B	Yes□	No⊠	Unknown □	0.031 ppm	ICPOES (0.01 ppm)	Avg. of 3 batches
Barium	Ва	3	Yes□	No⊠	Unknown □	0.023 ppm	ICPOES (0.0001 ppm)	Avg. of 3 batches
Chromium	Cr	3	Yes□	No⊠	Unknown □	<0.0009 ppm	ICPOES (0.0009 ppm)	Avg. of 3 batches
Copper	Cu	3	Yes□	No⊠	Unknown □	<0.002 ppm	ICPOES (0.002 ppm)	Avg. of 3 batches
Lithium	Li	3	Yes□	No⊠	Unknown □	0.075 ppm	ICPOES (0.00001 ppm)	Avg. of 3 batches
Molybdenum	Мо	3	Yes□	No⊠	Unknown □	0.005 ppm	ICPOES (0.003 ppm)	Avg. of 3 batches
Antimony	Sb	3	Yes□	No ⊠	Unknown □	<0.03 ppm	ICPOES (0.03 ppm)	Avg. of 3 batches
Tin	Sn	3	Yes□	No 🗵	Unknown □	<0.02 ppm	ICPOES (0.02 ppm)	Avg. of 3 batches

Reference: ICH Q3D Guideline for Elemental impurities, step 4 version, 2014 Authorized Signatory

cup.

Avantor Performance Materials India Limited.