

Scientific Documentation

Titanium Dioxide, USP

Not appropriate for regulatory submission.

Please visit www.spectrumchemical.com or contact Tech Services for the most up-to-date information contained in this information package.

Spectrum Chemical Mfg Corp
769 Jersey Avenue
New Brunswick, NJ 08901
Phone 732.214.1300



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Specification for Titanium Dioxide, USP (TI140)

| | |
|-------------------|-----------------------|
| Item Number | TI140 |
| Item | Titanium Dioxide, USP |
| CAS Number | 13463-67-7 |
| Molecular Formula | TiO ₂ |
| Molecular Weight | 79.87 |
| MDL Number | |
| Synonyms | Titanium (IV) Oxide |

| Test | Specification | |
|--------------------------|-----------------------------------|-------------|
| | Min | Max |
| ASSAY (DRIED BASIS) | 99.0 | 100.5 % |
| LEAD (Pb) | | 10 ppm |
| ANTIMONY (Sb) | | 2 ppm |
| MERCURY (Hg) | | 1 ppm |
| LOSS ON DRYING | | 0.5 % |
| LOSS ON IGNITION | | 0.5 % |
| WATER-SOLUBLE SUBSTANCES | | 0.25 % |
| ACID-SOLUBLE SUBSTANCES | | 0.5 % |
| ARSENIC (As) | | 1 ppm |
| ELEMENTAL IMPURITIES | | AS REPORTED |
| IDENTIFICATION | YELLOW RED TO ORANGE-RED COLOR | |
| CERTIFIED KOSHER | | |
| CERTIFIED HALAL | | |
| APPEARANCE | | |
| EXPIRATION DATE | | |
| DATE OF MANUFACTURE | | |
| RESIDUAL SOLVENTS | | AS REPORTED |
| MONOGRAPH EDITION | | |

Spectrum Chemical Mfg Corp

Corporate Headquarters: West Coast Facility:

| | |
|-------------------------|------------------------|
| 769 Jersey Ave. | 14422 S. San Pedro St. |
| New Brunswick, NJ 08901 | Gardena, CA 90248 |
| 732.214.1300 | 310.516.8000 |

Certificate Of Analysis

| | | | |
|-------------------|-----------------------|------------------|------------|
| Item Number | TI140 | Lot Number | INC0180 |
| Item | Titanium Dioxide, USP | CAS Number | 13463-67-7 |
| Molecular Formula | TiO ₂ | Molecular Weight | 79.87 |

| TEST | SPECIFICATION | | RESULT |
|--------------------------|--------------------------------|-------------|--------------------------------|
| | MIN | MAX | |
| ASSAY (DRIED BASIS) | 99.0 | 100.5 % | 99.3 % |
| LEAD (Pb) | | 10 ppm | <10 ppm |
| ANTIMONY (Sb) | | 2 ppm | <2 ppm |
| MERCURY (Hg) | | 1 ppm | <1 ppm |
| LOSS ON DRYING | | 0.5 % | 0.1 % |
| LOSS ON IGNITION | | 0.5 % | 0.1 % |
| WATER-SOLUBLE SUBSTANCES | | 0.25 % | 0.11 % |
| ACID-SOLUBLE SUBSTANCES | | 0.5 % | 0.3 % |
| ARSENIC (As) | | 1 ppm | <1 ppm |
| ELEMENTAL IMPURITIES | | AS REPORTED | COMPLIES WITH STANDARD |
| IDENTIFICATION | YELLOW RED TO ORANGE-RED COLOR | | YELLOW RED TO ORANGE-RED COLOR |
| CERTIFIED KOSHER | | | CERTIFIED KOSHER |
| CERTIFIED HALAL | | | CERTIFIED HALAL |
| APPEARANCE | | | WHITE POWDER |
| EXPIRATION DATE | | | 07-APR-2026 |
| DATE OF MANUFACTURE | | | 08-APR-2023 |
| RESIDUAL SOLVENTS | | AS REPORTED | NO RESIDUAL SOLVENTS PRESENT |
| MONOGRAPH EDITION | | | (USP-NF) 2023 |

Certificate of Analysis Results Entered By:

HBERMUDEZ
Hernan Bermudez
12-APR-24 11:01:30

Certificate of Analysis Results Approved By:

SHANSEN
Selin Hansen
15-APR-24 09:51:49

Spectrum Chemical Mfg Corp
14422 South San Pedro Street
Gardena 90248 CA



All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and SDS before handling any chemicals. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer's responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.

The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying impurities can be critical to predicting the best possible patient outcomes. Elemental Impurities has been a requirement of all products meeting USP/NF, EP and BP monographs since January 1, 2018. More information can be found in USP sections <232> Elemental Impurities – Limits and <233> Elemental Impurities – Procedures. Data for drug substances furnished by Spectrum Chemical Mfg. Corp can be used to ensure that patient daily exposures by oral administration to the selected elements are not exceeded in the formulation of pharmaceutical products.

SAFETY DATA SHEET

spectrum®



Revision date 17-May-2022

Revision Number 2

1. Identification

Product identifier

Product Name TITANIUM DIOXIDE, USP

Other means of identification

Product Code(s) TI140

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Spectrum Chemical Mfg. Corp.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

| | |
|-----------------|------------|
| Carcinogenicity | Category 2 |
|-----------------|------------|

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

Suspected of causing cancer



Appearance Powder

Physical state Solid

Odor No information available

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

No information available.

3. Composition/information on ingredients

Substance

| Chemical name | CAS No | Weight-% | Trade secret |
|------------------|------------|----------|--------------|
| Titanium Dioxide | 13463-67-7 | 100 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice

IF exposed or concerned: Get medical advice/attention.

Inhalation

Remove to fresh air.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.
Consult a physician.

Skin contact

Wash skin with soap and water.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No information available. |
| Explosion data | |
| Sensitivity to mechanical impact | none. |
| Sensitivity to static discharge | none. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

| | |
|---|--|
| <u>Personal precautions, protective equipment and emergency procedures</u> | |
| Personal precautions | Ensure adequate ventilation. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |

Methods and material for containment and cleaning up

| | |
|--------------------------------|---|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |

7. Handling and storage

Precautions for safe handling

| | |
|--------------------------------|---|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. |
|--------------------------------|---|

Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. |
|---------------------------|---|

8. Exposure controls/personal protection

Control parameters

Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|--------------------------------|-------------------|--------------------------|------------|
| Titanium Dioxide 13463-67-7 | No data available | 15 mg/m ³ TWA | - |

Appropriate engineering controls

| | |
|-----------------------------|-----------------------------|
| Engineering controls | Showers Eyewash stations |
|-----------------------------|-----------------------------|

Ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|--|
| Eye/face protection | No special protective equipment required. |
| Hand protection | Wear suitable gloves. |
| Skin and body protection | Wear suitable protective clothing. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Solid |
| Appearance | Powder |
| Color | White |
| Odor | No information available |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|----------------------|--------------------------------|
| pH | no data available | None known |
| Melting point / freezing point | >1700 °C / °F | None known |
| Boiling point / boiling range | no data available | None known |
| Flash point | no data available | None known |
| Evaporation rate | no data available | None known |
| Flammability (solid, gas) | no data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | None known |
| Vapor density | no data available | None known |
| Relative density | 4.2 | None known |
| Water solubility | Insoluble in water | None known |
| Solubility(ies) | no data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | no data available | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | no data available | None known |
| Dynamic viscosity | No data available | None known |

Other information

| | |
|-----------------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and reactivity

| | |
|---------------------------|---------------------------------|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|-----------------------|-------------|--------------------------|
| Titanium Dioxide 13463-67-7 | > 10000 mg/kg (Rat) | - | > 6820 mg/m ³ |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|--------------------------------|-------|---|-----|------|
| Titanium Dioxide 13463-67-7 | - | Group 2B - Possibly Carcinogenic to Humans - Monograph 93 [2010] Monograph 47 [1989] | - | - |

Legend

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects respiratory system, lungs.

Aspiration hazard No information available.

Other adverse effects No information available.

| | |
|---------------------|---------------------------|
| Interactive effects | No information available. |
|---------------------|---------------------------|

12. Ecological information

| | |
|--|---|
| Ecotoxicity | The environmental impact of this product has not been fully investigated. |
| Persistence and degradability Bioaccumulation | No information available. Inherently biodegradable. |
| Other adverse effects | No information available. |

13. Disposal considerations

Waste treatment methods

| | |
|-------------------------------------|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. |

14. Transport information

| | |
|-------------------|---------------|
| <u>DOT</u> | not regulated |
| <u>TDG</u> | not regulated |
| <u>MEX</u> | not regulated |
| <u>ICAO (air)</u> | not regulated |
| <u>IATA</u> | not regulated |
| <u>IMDG</u> | not regulated |
| <u>RID</u> | not regulated |
| <u>ADR</u> | not regulated |
| <u>ADN</u> | not regulated |

15. Regulatory information

International Inventories

| | |
|------|----------|
| TSCA | Complies |
|------|----------|

| | |
|---------------|---|
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | This product complies with ENCS: |
| IECSC | This product complies with China: |
| KECL | Complies |
| PICCS | Complies |
| AICS | All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS). |

Legend:**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:.

| Chemical name | California Proposition 65 |
|-------------------------------|---------------------------|
| Titanium Dioxide - 13463-67-7 | carcinogen |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| Titanium Dioxide 13463-67-7 | 1861 | Present | Present |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information**NFPA**

Health hazards 0

Flammability 0

Instability 0

Physical and chemical properties -

HMIS

Health hazards 1*

Flammability 0

Physical hazards 0

Personal protection X
Chronic Hazard Star Legend

* = Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | | |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 17-May-2022

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



December 6, 2021

Certification of Compliance with current Good Manufacturing Practices

Dear Valued Customer:

Spectrum Chemical Mfg Corp certifies that the following product(s) is produced, processed, packaged and held in compliance with current Good Manufacturing Practices (cGMP) in accordance with the applicable parts of 21 CFR, parts 210 and 211 of the Code of Federal Regulations.

| Catalog Number | Product Name |
|----------------|-----------------------|
| TI140 | Titanium Dioxide, USP |

Spectrum is an FDA registered and inspected Drug Establishment. Our United States Food and Drug Administration (USFDA) Registration numbers are as follows:

Spectrum-Gardena, CA: 2020632
Spectrum-New Brunswick, NJ: 2246824

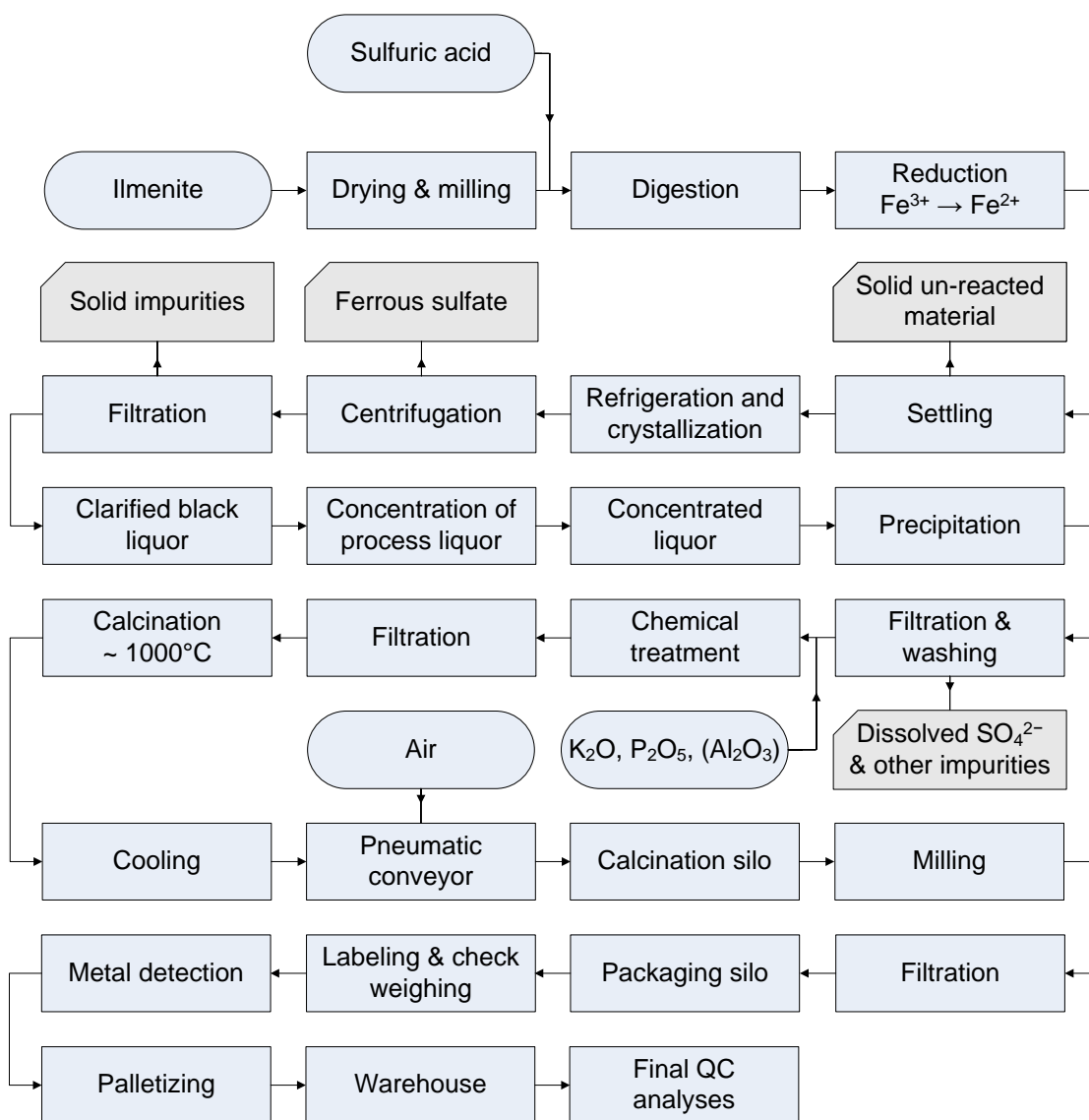
Thank you for your interest in Spectrum products. If we may be of further assistance, please feel free to contact the Quality Assurance department at 310-516-8000 or via email at qualityassurance@spectrumchemical.com

Sincerely,

Oralia Chavez
Quality Assurance Specialist

Manufacturing Process Flowchart

Titanium Dioxide, USP – TI140



Spectrum Chemical Mfg Corp

Corporate Headquarters:

769 Jersey Ave.
New Brunswick, NJ 08901
732.214.1300

West Coast Facility:

14422 S. San Pedro St.
Gardena, CA 90248
310.516.8000

TI140, Titanium Dioxide, USP

Source Statement

The above mentioned catalog item is manufactured from mineral origin. No animal or plant derived products are used in the manufacturing process.

BSE/TSE Statement

The above mentioned catalog item does not contain nor is manufactured using any animal derived products and is therefore, BSE/TSE free.

Allergen Statement

The above mentioned catalog item does not contain any of the following:

- Milk
- Egg
- Fish
- Shellfish
- Tree Nuts
- Wheat
- Peanuts
- Soy
- Cereals containing Gluten
- Celery
- Mustard
- Sesame Seed
- Corn
- Latex
- Sulfites > 10 ppm

GMO Statement

The above mentioned catalog item is manufactured without the use of genetically modified organisms and is therefore GMO free.

Melamine Statement

The above mentioned catalog does not use or add melamine to the manufacturing process and is considered melamine-free.

Nitrosamine Statement

Based on knowledge of the manufacturing process, nitrosamine impurities are not known or suspected to be present in this material.

Animal Testing Statement

The above mentioned catalog item has been tested on animals for regulatory compliance purposes only.

Organic Compliance Statement

The above mentioned catalog item has not been produced using GMOs, irradiation or ethylene oxide (EtO).

Shelf Life Statement

The above mentioned catalog item is typically assigned a shelf life of 36 months from the date of manufacture. The actual assigned shelf life for any specific lot should be referenced on the Certificate of Analysis.

Other Chemicals Statement

Spectrum does not have any reason to suspect the above mentioned catalog item contains any of the following chemicals. This product does not come into contact with these chemicals during packaging or storage:

- | | |
|---------------------|-----------------|
| • Aflatoxins | • Parabens |
| • Antibiotics | • Pesticides |
| • Bisphenol A (BPA) | • Phthalates |
| • CMR Substances | • Preservatives |



RE: Elemental Impurities - Titanium Dioxide, USP (Cat# TI140)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above material complies with the USP<232>, <233> Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. The following elemental impurities are likely to be present:

| Elemental Impurity | | Class | Expected Concentration |
|--------------------|----|-------|------------------------|
| Cadmium | Cd | 1 | < 1 ppm |
| Lead | Pb | 1 | < 5 ppm |
| Arsenic | As | 1 | < 1 ppm |
| Mercury | Hg | 1 | < 1 ppm |
| Cobalt | Co | 2A | < 1 ppm |
| Vanadium | V | 2A | < 10 ppm |
| Nickel | Ni | 2A | < 5 ppm |
| Thallium | Tl | 2B | < 1 ppm |
| Gold | Au | 2B | < 1 ppm |
| Palladium | Pd | 2B | < 1 ppm |
| Iridium | Ir | 2B | < 1 ppm |
| Osmium | Os | 2B | < 5 ppm |
| Rhodium | Rh | 2B | < 1 ppm |
| Ruthenium | Ru | 2B | < 1 ppm |
| Selenium | Se | 2B | < 5 ppm |
| Silver | Ag | 2B | < 5 ppm |
| Platinum | Pt | 2B | < 1 ppm |
| Lithium | Li | 3 | < 5 ppm |
| Antimony | Sb | 3 | < 10 ppm |
| Barium | Ba | 3 | < 20 ppm |
| Molybdenum | Mo | 3 | < 5 ppm |
| Copper | Cu | 3 | < 5 ppm |
| Tin | Sn | 3 | < 5 ppm |
| Chromium | Cr | 3 | < 5 ppm |

Other elemental impurities considered by USP <232>, <233> and ICH Q3D which are not addressed in the above mentioned table are not likely to be present. These

CORPORATE HEADQUARTERS

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substances are not used in the production process, are not intentionally added or known to be present in the above mentioned material.

This information is subject to change and is intended for risk assessment only. It is responsibility of the end user to evaluate suitability of any chemical for the intended use as well as to assess compound-specific limits of daily intake of metal impurities. For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,

Technical Services
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.

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New Brunswick, NJ 08901
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FAX 732.246.7132

WEST COAST FACILITY

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843



RE: Residual Solvents - Titanium Dioxide, USP (Cat# TI140)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned catalog item complies with the requirements of the USP <467> Residual Solvents and the ICH Q3C Residual Solvents Guideline. No Class 1, Class 2, Class 3 or other solvents are used or produced in the manufacture of this product.

For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,

Technical Services
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.

CORPORATE HEADQUARTERS

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New Brunswick, NJ 08901

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14422 South San Pedro Street

Gardena, California 90248

PHONE 310.516.8000

FAX 310.516.9843

Label Information

The Spectrum label presents technical and safety information in an easily understood format. Our technical specialists stay abreast of the latest requirements of the Globally Harmonized System for Classification and Labelling of Chemicals (GHS), as well as the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA) and other government regulatory agencies in order to ensure compliance, accuracy and concise hazard communication.

Retest Date: 03-31-2025

WARNING

- Suspected of causing cancer.
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Wear protective gloves, protective clothing, eye protection, face protection.

FIRST AID: If exposed or concerned: Get medical attention.

KEEP FROM CHILDREN

spectrum®
CHEMICAL MFG CORP

TI140 **2.5 KG**

Titanium Dioxide
[Titanium (IV) Oxide]

USP

CAS 13463-67-7

CAUTION: For manufacturing, processing or repacking.
Read and understand the label and Safety Data Sheet (SDS) prior to use.

Chemical Emergency: (800)424-9300

www.SpectrumChemical.com

TiO₂ **F.W. 79.87**

Assay (Dried Basis) 99.0-100.5%

MAXIMUM LIMITS

Lead (Pb) 10 ppm

Antimony (Sb) 2 ppm

Mercury (Hg) 1 ppm

Loss on Drying 0.5%

Loss on Ignition 0.5%

Water-Soluble Substances 0.25%

Acid-Soluble Substances 0.5%

Arsenic (As) 1 ppm

Elemental Impurities As reported

Residual Solvents To pass test

Keep tightly closed.

WARNING: Cancer and Reproductive Harm
www.P65Warnings.ca.gov

G 13/H11GHS **Lot No. 062233**

SPECTRUM CHEMICAL MFG. CORP. Gardena, CA 90248 • New Brunswick, NJ 08901

- | | | |
|---|--|---|
| A Bar Code | G Chemical Abstracts Service (CAS) Registry Number | K Empirical Formula, Formula Weight and Technical Specifications Panel |
| B GHS Hazard Pictograms | H Caution Information | L Expiration Information |
| C Warning, Safety Data and Precautionary Information | I DOT Shipping Information | M Lot Number |
| D Product Catalog Number | J Toll-Free 24-Hour Chemical Emergency Telephone Number | N Kosher Certified by Kosher Supervision of America (KSA). |
| E Item Name, Form, Grade | | O Storage Color Band |
| F Size/Quantity | | P Halal Certified by IFANCA |
| | | Q bioCertified |

This color-coded band indicates the hazard most likely to be posed by that material under storage conditions. The criteria used to assign band colors have been established by the Storage Code working group of the Society for Chemical Hazard Communication (SCHC). It is recommended that like colors be stored together, unless otherwise stated, based on the color codes indicated to the right. However, it is the responsibility of the customer to check with their local fire department for possible conflicts with our recommendations when storing hazardous chemicals.

Spectrum Chemical Mfg Corp

Corporate Headquarters:
769 Jersey Ave.
New Brunswick, NJ 08901
732.214.1300

West Coast Facility:
14422 S. San Pedro St.
Gardena, CA 90248
310.516.8000

- YELLOW:** Oxidizer
- RED:** Flammable
- GREEN:** General Storage
- BLUE:** Health Hazard
- WHITE:** Corrosive



KOSHER SUPERVISION OF AMERICA

בס"ד
Jan 29, 2024

The following product(s) prepared by the named company are certified kosher with the stated requirements:

Spectrum Laboratory Products, Inc.

S-0032

14422 South San Pedro Street,
Gardena, CA 90248
755-769 Jersey Ave.
New Brunswick NJ 08901
USA

Product Name TI140, Titanium Dioxide, USP

Brand Spectrum

UKD-ID KSAV3-E5E0E73

D/P/M P

Symbol Required KSA

Special Conditions

This certificate expires on
Feb 01, 2025

Rabbi Binyomin Lisbon
Kashrus Administrator

Placing the KSA logo on products not listed above constitutes an un-authorized use of the KSA symbol, which is a federally registered trademark.