

Scientific Documentation

Caffeine, Anhydrous, 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 Caffeine, Anhydrous, USP (C4036)

Item Number	C4036
Item	Caffeine, Anhydrous, USP
CAS Number	58-08-2
Molecular Formula	C ₈ H ₁₀ N ₄ O ₂
Molecular Weight	194.19
MDL Number	
Synonyms	1,3,7-Trimethylxanthine

Test	Specification	
	Min	Max
ASSAY (ANHYDROUS BASIS)	98.5	101.0 %
WATER DETERMINATION		0.5 %
RESIDUE ON IGNITION		0.1 %
ORGANIC IMPURITIES:		
INDIVIDUAL IMPURITY		0.1 %
TOTAL IMPURITIES		0.1 %
ELEMENTAL IMPURITIES:		
ARSENIC (As)	AS REPORTED	
CADMIUM (Cd)	AS REPORTED	
LEAD (Pb)	AS REPORTED	
MERCURY (Hg)	AS REPORTED	
IDENTIFICATION (A) FTIR	SPECTRUM MATCHES REFERENCE	
IDENTIFICATION (B)	RETENTION TIME CORRESPONDS TO STANDARD	
CERTIFIED HALAL		
APPEARANCE		
EXPIRATION DATE		
DATE OF MANUFACTURE		
MONOGRAPH EDITION		
RESIDUAL SOLVENTS	AS REPORTED	

Spectrum Chemical Mfg Corp

<i>Corporate Headquarters:</i>	<i>West Coast Facility:</i>
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	C4036	Lot Number	2MK0151
Item	Caffeine, Anhydrous, USP	CAS Number	58-08-2
Molecular Formula	C ₈ H ₁₀ N ₄ O ₂	Molecular Weight	194.19

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (ANHYDROUS BASIS)	98.5	101.0 %	99.31 %
WATER DETERMINATION		0.5 %	0.19 %
RESIDUE ON IGNITION		0.1 %	0.05 %
ORGANIC IMPURITIES:			.
INDIVIDUAL IMPURITY		0.1 %	0.01 %
TOTAL IMPURITIES		0.1 %	0.02 %
ELEMENTAL IMPURITIES:			.
ARSENIC (As)	AS REPORTED		<5 ppm
CADMIUM (Cd)	AS REPORTED		<0.3 ppm
LEAD (Pb)	AS REPORTED		<0.3 ppm
MERCURY (Hg)	AS REPORTED		<0.2 ppm
IDENTIFICATION (A) FTIR	SPECTRUM MATCHES REFERENCE		SPECTRUM MATCHES REFERENCE
IDENTIFICATION (B)	RETENTION TIME CORRESPONDS TO STANDARD		RETENTION TIME CORRESPONDS WITH STANDARD
CERTIFIED HALAL			CERTIFIED HALAL
APPEARANCE			WHITE POWDER
EXPIRATION DATE			01-NOV-2026
DATE OF MANUFACTURE			01-DEC-2021
MONOGRAPH EDITION			USP 2023
RESIDUAL SOLVENTS	AS REPORTED		.
CLASS 2 (solvent) / CHLOROFORM			<60 ppm
CLASS 3 (solvent) / ACETIC ACID			<5000 ppm

TEST	SPECIFICATION		RESULT
	MIN	MAX	
CLASS 3 (solvent) / FORMIC ACID			<5000 ppm

Certificate of Analysis Results Entered By:

GHERRERA
Genaro Herrera
29-NOV-23 05:40:07

Certificate of Analysis Results Approved By:

MCAMACHO
Matheu Camacho
29-NOV-23 05:43:59

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ



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.

SAFETY DATA SHEET

spectrum®



Revision date 27-April-2020

Revision Number 1

1. Identification

Product identifier

Product Name CAFFEINE, ANHYDROUS, USP

Other means of identification

Product Code(s) C4036

UN/ID no UN1544

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

Acute toxicity - Oral

Category 3

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Toxic if swallowed



Appearance Crystalline

Physical state Solid

Odor Odorless

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor
Rinse mouth

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
Caffeine, Anhydrous	58-08-2	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	Show this safety data sheet to the doctor in attendance.
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	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.

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.
Hazardous combustion products	Carbon Monoxide, Carbon Dioxide. Nitrogen oxides (NOx).
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

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
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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.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.
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8. Exposure controls/personal protection

Control parameters

Exposure Limits	The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.
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Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
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Individual protection measures, such as personal protective equipment

Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
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	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Crystalline
Color	white
Odor	Odorless
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	pH of a 1% solution = 6.9	None known
Melting point / freezing point	236 - 238 °C / 456.8 - 460.4 °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	1.23	None known
Water solubility	Partially soluble in cold water Soluble in hot water	None known
Solubility(ies)	Freely soluble in pyrrole; in tetrahydrofuran containing about 4% water Partially soluble in acetone Partially soluble in alcohol Slightly soluble in Petroleum Ether Soluble in ethyl acetate Soluble in pyridine Very slightly soluble in diethyl ether	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	194.19
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. Toxic if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity

Numerical measures of toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Caffeine, Anhydrous 58-08-2	= 192 mg/kg (Rat)	-	-

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	No information available.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Caffeine, Anhydrous 58-08-2	-	Monograph 51 [1991]	-	-

Legend

Reproductive toxicity	No information available.
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STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Caffeine, Anhydrous 58-08-2	-	LC50: =151mg/L (96h, Pimephales promelas)	-	EC50: =182.12mg/L (4h, Daphnia species)

Persistence and degradability	No information available.
Bioaccumulation	Inherently biodegradable.

Component Information

Chemical name	Partition coefficient
Caffeine, Anhydrous 58-08-2	-0.07

Other adverse effects	No information available.
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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

DOT

UN/ID no	UN1544
Proper Shipping Name:	Alkaloids, solid, n.o.s.
Hazard class	6.1
Packing group:	III
Special Provisions	IB8, IP3, T1, TP33
Marine Pollutant	Severe Marine Pollutant
Description:	UN1544, Alkaloids, solid, n.o.s., 6.1, III
Emergency Response Guide Number	151

TDG

UN-No:	UN1544
Proper Shipping Name:	Alkaloid salts, solid, n.o.s.
Hazard class	6.1
Packing Group:	III
Description:	UN1544, Alkaloid salts, solid, n.o.s., 6.1, III

MEX

UN-No	UN1544
Proper Shipping Name	Alkaloids, solid, n.o.s.

Hazard class	6.1
Special Provisions	43, 223, 274
Packing Group	III
Description	UN1544, Alkaloids, solid, n.o.s., 6.1, III

ICAO (air)

UN-No:	UN1544
Proper Shipping Name:	Alkaloid salts, solid, n.o.s.
Hazard class	6.1
Packing Group:	III
Special Provisions	A3, A5, A6
Description:	UN1544, Alkaloid salts, solid, n.o.s., 6.1, III

IATA

UN number	UN1544
Proper Shipping Name:	Alkaloid salts, solid, n.o.s.
Transport hazard class(es)	6.1
Packing group	III
Description:	UN1544, Alkaloid salts, solid, n.o.s., 6.1, III

IMDG

UN number	UN1544
Proper shipping name	Alkaloids, solid, n.o.s.
Transport hazard class(es)	6.1
Packing group	III
EmS-No	F-A, S-A
Special Provisions	43, 223, 274
Marine pollutant	NP1
Description	UN1544, Alkaloids, solid, n.o.s., 6.1, III

RID

UN number	UN1544
Proper Shipping Name:	Alkaloids, solid, n.o.s.
Transport hazard class(es)	6.1
Packing group	III
Classification code	T2
Special Provisions	43, 274
Description:	UN1544, Alkaloids, solid, n.o.s., 6.1, III
Labels	6.1

ADR

UN number	1544
Proper Shipping Name:	Alkaloids, solid, n.o.s.
Transport hazard class(es)	6.1
Packing group	III
Classification code	T2
Tunnel restriction code	(E)
Special Provisions	43, 274
Description:	1544, Alkaloids, solid, n.o.s., 6.1, III, (E)
Labels	6.1

ADN

UN/ID No	UN1544
Proper shipping name	Alkaloids, solid, n.o.s.
Transport hazard class(es)	6.1
Packing Group	III
Classification code	T2
Special Provisions	274, 43, 802
Description	UN1544, Alkaloids, solid, n.o.s., 6.1, III
Hazard label(s)	6.1
Limited quantity (LQ)	5 kg
Equipment Requirements	PP, EP

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 does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

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** 0**Flammability** 0**Physical hazards** 0**Personal protection** X**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

27-April-2020

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



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
C4036	Caffeine, Anhydrous, 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

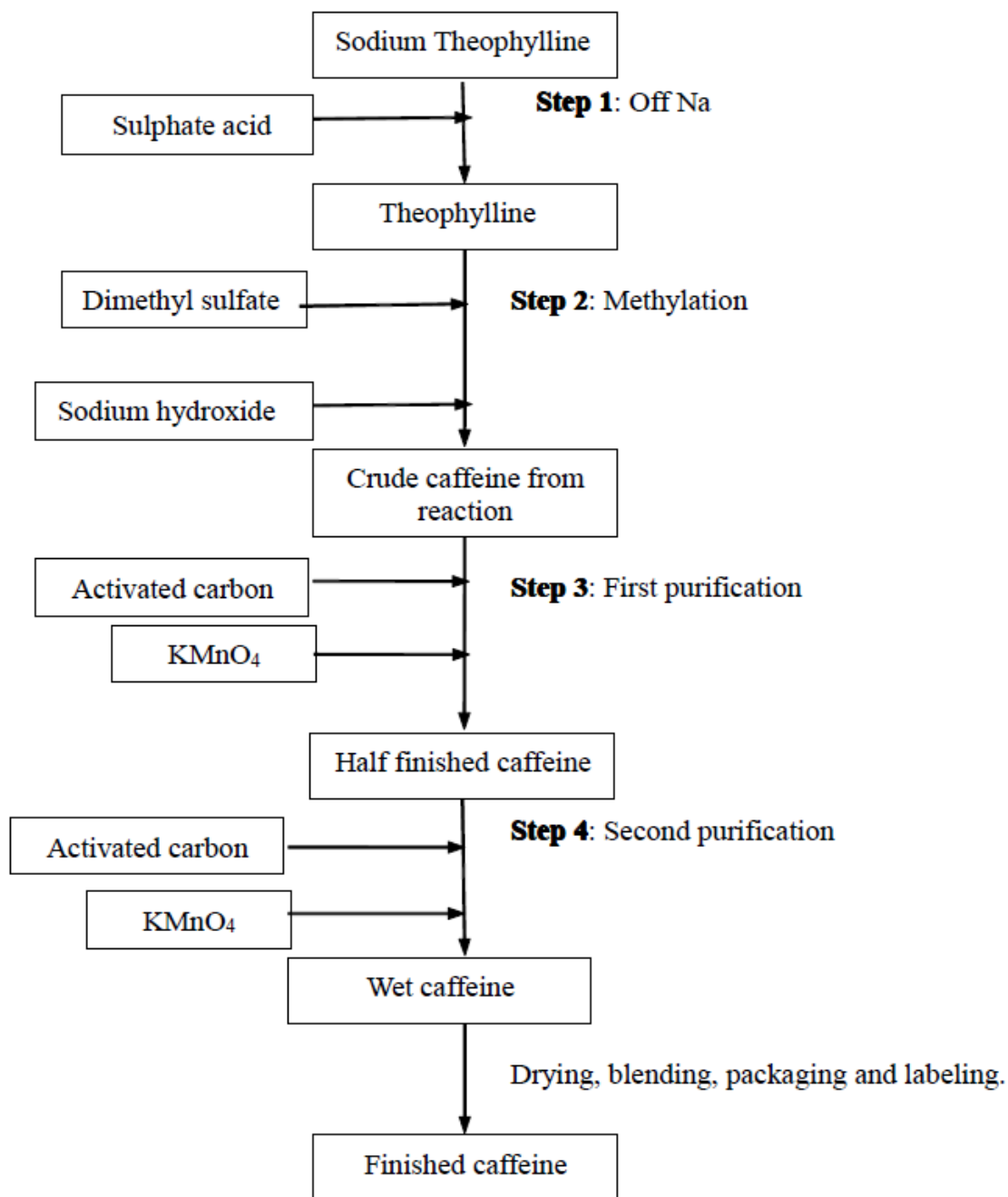
Thank you for your interest in Spectrum products. If we may be of further assistance, please feel free to contact the Quality Assurance department at 310-516-8000 or via email at qualityassurance@spectrumchemical.com

Sincerely,

A handwritten signature in black ink, appearing to read "Oralia Chavez", written in a cursive style.

Oralia Chavez
Quality Assurance Specialist

Manufacturing Process Flowchart Caffeine, Anhydrous, USP (Cat# C4036)



CORPORATE HEADQUARTERS

769 Jersey Avenue

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

C4036, Caffeine, Anhydrous, USP

Source Statement

The above mentioned catalog item is manufactured by chemical synthesis. 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

EU Fragrance Allergen Statement

The above mentioned catalog item does not contain any of the 26 EU fragrance allergens listed in Annex III lines 67-92. These substances are not intentionally added to the following chemical and therefore are not expected to be present.

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 not been tested on animals.

Organic Compliance Statement

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

Shelf Life Statement

The above-mentioned catalog item is typically assigned a shelf life of 60 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 - Caffeine, Anhydrous, USP (Cat# C4036)

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	< 0.3 ppm
Lead	Pb	1	< 0.3 ppm
Arsenic	As	1	< 5.0 ppm
Mercury	Hg	1	< 0.2 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 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.

CORPORATE HEADQUARTERS

769 Jersey Avenue

New Brunswick, NJ 08901

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WEST COAST FACILITY

14422 South San Pedro Street

Gardena, California 90248

PHONE 310.516.8000

FAX 310.516.9843



RE: Residual Solvents - Caffeine, Anhydrous, USP (Cat# C4036)

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 USP <467> Residual Solvents and ICH Q3C Residual Solvents Guideline. The following solvents are likely to be present:

Residual Solvent	Class	Expected Concentration
Chloroform	2	< 60 ppm
Acetic Acid	3	< 5000 ppm
Formic Acid	3	< 5000 ppm

No Class 1 or other solvents are used or produced in the manufacturing process of this material.

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
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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. Below you will find a typical label example for this catalog item.



DANGER

- Toxic if swallowed.
- Do not eat, drink or smoke when using this product • Wash face, hands and any exposed skin thoroughly after handling.

FIRST AID: IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth.

KEEP FROM CHILDREN



C4036

Caffeine
(1,3,7-Trimethylxanthine)

Anhydrous, USP

CAS 58-08-2

CAUTION: For manufacturing, processing or laboratory use only. Not for use as an Active Pharmaceutical Ingredient (API). Read and understand the label and Safety Data Sheet (SDS) prior to use.

DOT: UN1544, Alkaloid, solid, n.o.s. (caffeine), 6.1, PG III

Chemical Emergency: (800)424-9300

www.SpectrumChemical.com

SIZ SY

$C_8H_{10}N_4O_2$ F.W. 194.19

Assay (Anhydrous Basis) 98.5-101.0%

MAXIMUM LIMITS

Water Determination 0.5%

Residue on Ignition 0.1%

Organic Impurities:

Individual Impurity 0.1%

Total Impurities 0.1%

Elemental Impurities As reported

Residual Solvents To pass test

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

B 1/J4GHS ? Lot No. XQ####

Spectrum Chemical Mfg Corp

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