

Scientific Documentation

Lidocaine Hydrochloride, Monohydrate, 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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Certificate of Analysis Safety Data Sheet (SDS) Certification of Current Good Manufacturing Practices (cGMP) Manufacturing Process Flowchart Technical Statements Elemental Impurities Statement Residual Solvents Statement General Label Information – Sample Label



Specification for Lidocaine Hydrochloride, Monohydrate, USP (LI103)

Item Number	LI103
Item	Lidocaine Hydrochloride, Monohydrate, USP
CAS Number	6108-05-0
Molecular Formula	$C_{14}H_{22}N_2O \bullet HCI \bullet H_2O$
Molecular Weight	288.81
MDL Number	
Synonyms	Lignocaine Hydrochloride

Test	Specification	
	Min	Max
APPEARANCE		
ASSAY (ANHYDROUS BASIS)	97.5	102.5%
WATER DETERMINATION	5.0	7.0%
RESIDUE AFTER IGNITION		0.1%
SULFATE		0.1 %
ORGANIC IMPURITIES:		
LIDOCAINE RELATED COMPOUND H		0.10 %
ROPIVACAINE RELATED COMPOUND A		0.01 %
ANY INDIVIDUAL IMPURITY		0.10 %
TOTAL IMPURITIES		0.5 %
ELEMENTAL IMPURITIES	AS REPORTED	
IDENTIFICATION A) FTIR	SPECTRUM MATCHES REFERENCE	
IDENTIFICATION (B)	RETENTION TIME CORRESPONDS TO STANDARD	
IDENTIFICATION (C)	POSITIVE FOR CHLORIDE	
EXPIRATION DATE		
DATE OF MANUFACTURE		
MONOGRAPH EDITION		

Test	Specification	
	Min	Max
RESIDUAL SOLVENTS	AS REPORTED	

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	LI103	Lot Number	4NE0027
Item	Lidocaine Hydrochloride, Monohydrate, USP	Manufacturer Lot	LDH/724001
CAS Number	6108-05-0	Manufacturer Code	7068
Molecular Formula	$C_{14}H_{22}N_2O\bullet HCI\bullet H_2O$	Molecular Weight	288.81

	SPECIF	ICATION	
TEST	MIN	MAX	RESULT
APPEARANCE			WHITE CRYSTALLINE POWDER
ASSAY (ANHYDROUS BASIS)	97.5	102.5%	99.9 %
WATER DETERMINATION	5.0	7.0%	6.56 %
RESIDUE AFTER IGNITION		0.1%	0.1 %
SULFATE		0.1 %	<0.1 %
ORGANIC IMPURITIES:			<0.10 %
LIDOCAINE RELATED COMPOUND H		0.10 %	<0.10 %
ROPIVACAINE RELATED COMPOUND A		0.01 %	<0.01 %
ANY INDIVIDUAL IMPURITY		0.10 %	<0.10 %
TOTAL IMPURITIES		0.5 %	<0.5 %
ELEMENTAL IMPURITIES	AS REPORTED		COMPLIES WITH STANDARD
IDENTIFICATION A) FTIR	SPECTRUM MATCHES REFERENCE		SPECTRUM MATCHES REFERENCE
IDENTIFICATION (B)	RETENTION TIME CORRESPONDS TO STANDARD		RETENTION TIME CORRESPONDS TO STANDARD
IDENTIFICATION (C)	POSITIVE FOR CHLORIDE		POSITIVE FOR CHLORIDE
EXPIRATION DATE			31-DEC-2028
DATE OF MANUFACTURE			01-JAN-2024
MONOGRAPH EDITION			USP 2024
RESIDUAL SOLVENTS	AS REPORTED		
CLASS 2 (solvent) TOLUENE			<890 ppm
CLASS 3 (solvent) / ACETONE			<5000 ppm

Certificate of Analysis Results Entered By:

MCAMACHO Matheu Camacho 06-AUG-24 06:31:58

Spectrum Chemical Mfg Corp 777 Jersey Avenue New Brunswick NJ 08901 MTHUKU Marieta Thuku 06-AUG-24 06:33:38



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.

Spectrum Chemical Mfg. Corp. repackages Active Pharmaceutical Ingredient chemicals provided by other manufacturers and suppliers. For traceability purposes, Spectrum's Certificate of Analysis contains an identifier code unique to each manufacturer or supplier, as well as the chemical's lot number provided on the original manufacturer Certificate of Analysis. This material is manufactured by Swati Spentose Private Limited at A-1/2102,2103, Phase III, GIDC-Vapi, Gujarat 396195, India (IND). Copies of the original Certificate of Analysis are available upon request from your Spectrum Sales Representative or by calling Spectrum's Quality Department at 1-800-772-8786.

1. Identification

Product identifier	
Product Name	LIDOCAINE HYDROCHLORIDE, MONOHYDRATE, USP
Other means of identification	
Product Code(s)	LI103
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

Hazards not otherwise classified (HNOC) Not applicable.

Label elements

SAFETY DATA SHEET This safety data sheet was created pursuant to the

spectrum[®]

Revision date 02-February-2025

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision	Number	4

Category 4



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: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Unknown acute toxicity

Other information

No information available.

3. Composition/information on ingredients

Substance

Chemical name	CAS No.	Weight-%
Lidocaine Hydrochloride, Monohydrate	6108-05-0	100

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. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
Effects of Exposure	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.
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). hydrogen chloride gas.
Explosion data Sensitivity to mechanical impac	t None.
Sensitivity to static discharge	None.
Special protective equipment and precautions 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.

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.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling	
Technical Measures/Precautions:	Provide sufficient air exchange and/or exhaust in work rooms Avoid dust formation Keep away from incompatible materials
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage, including any incompatibilities	

Storage Conditions

Keep container tightly closed. Store at controlled room temperature.

Incompatible Materials:

Strong oxidizing agents

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.	
Appropriate engineering controls		
Engineering controls	Showers Eyewash stations Ventilation systems.	
Individual protection measures, such as personal protective equipment		
Eye/face protection	Appropriate eye/face protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.	
Hand protection	Appropriate hand protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.	
Skin and body protection	Appropriate skin and body protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.	
Respiratory protection	Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	

9. Physical and chemical properties

Information on basic physical and Physical state Appearance Color	Solid Crystalline powder White	
Odor	Characteristic	
Odor threshold	No information available	
Property	Values	Remarks • Method
рН	No data available	None known
pH (as aqueous solution)		None known
Melting point / freezing point	74 °C / 165.2 °F	None known
Initial boiling point and boiling rangeNo data available		None known
Flash point	No data available	None known
Evaporation rate	no data available	None known

LI103 - LIDOCAINE HYDROCHLORIDE, MONOHYDRATE, USP

Flammability	no data available	None known None known
Flammability Limit in Air Upper flammability or explosive limits	No data available	NOTE KTOWT
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	no data available	None known
Water solubility	Soluble in water	None known
Solubility(ies)	Insoluble in diethyl ether	None known
	Soluble in Benzene	
	Soluble in Ethanol	
	Soluble in Chloroform	
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	288.81	
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 recommended storage 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 Spontaneous polymerisation.

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. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
Acute toxicity	No information available.
Numerical measures of toxicity No	o information available
Unknown acute toxicity	
Delayed and immediate effects as v	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.
Reproductive toxicity	No information available.
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	The environmental impact of this product has not been fully investigated.	
Persistence and degradability	No information available.	
Bioaccumulation	There is no data for this product.	
Other adverse effects	No information available.	

13. Disposal considerations

Disposal 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	Not regulated
TDG	Not regulated
<u>MEX</u>	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
ADR	Not regulated
RID	Not regulated

15. Regulatory information

International Inventories

TSCA

Not listed

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDSL	Does not Comply
EINECS/ELINCS	Does not Comply
ENCS	This product complies with ENCS:
IECSC	This product does not comply with china:
KECL	Does not Comply
PICCS	Does not Comply
AIIC	All the constituents of this material are listed on the Australian Inventory of Chemical
	Substances (AICS).
NZIoC	Does not comply
TCSI	Does not comply
Logondi	

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

NZIOC - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

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).

CAA (Clean Air Act)

This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

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

International Inventories

Chemical name	CAS No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	IECSC	AIIC	EINECS-No.
	6108-05-0	Not Present. Exempt from TSCA 8(b) Inventory listing since it is a hydrate. However, the anhydrous form		Not present	Not present	Not listed	X	Not present

(CAS no. 73-78-9) is listed on the TSCA 8(b) Inventory.			
Inventory.			

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

<u>Chemicals Known to the State of California to Cause Cancer:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemical name	CAS No.	Carcinogen	Developmental	Male Reproductive	Female Reproductive
			Toxicity	Toxicity	Toxicity:
	6108-05-0	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

CERCLA TSCA

Chemical name	CAS No.	Hazardous Substances RQs	Section 302 Extremely Hazardous Substances and RQs	
	6108-05-0		None	None

U.S. TSCA

Chemical name	CAS No.	TSCA Section 5(a)2 - TSCA 8(d) -Health and Safety Reportin
		Chemicals With Significant
		New Use Rules (SNURS)
	6108-05-0	Not Applicable Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification	The WHMIS 2015 classification of this product has not been validated or reviewed yet.
Information:	

Canada Hazardous Products Regulation This product has not been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Not listed Does not Comply

Chemical name	CAS No.	Canada (DSL)	Canada (NDSL)
	6108-05-0	Not Listed	Not Listed

Chemical name	CAS No.	CEPA Schedule I - Toxic Substances
	6108-05-0	Not listed
Chemical name	CAS No.	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
	6108-05-0	Not listed

Chemical name	CAS No.	EU GHS - SV - CLP (1272/2008)

6108-05-0

<u>S -phrase(s)</u>

none

Chemical name		 Concentration Limits:	Safety Phrases
Lidocaine Hydrochloride, Monohydrate	6108-05-0	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Not dangerous

16. Other info	ormation			
<u>NFPA</u> HMIS	Health hazards 2 Health hazards 2	Flammability 0 Flammability 0	Instability 0 Physical hazards 0	Special hazards - Personal protection X
Key or legend to	abbreviations and acronyms	used in the safety data	a sheet	
PBT: Persistent, I vPvB: Very Persis	Concentration	T) Substances		
	8: EXPOSURE CONTROLS/PI			
TWA Ceiling +	TWA (time-weighted average) Maximum limit value Sensitizers	STEL Sk*	STEL (Short Terr Skin designation	n Exposure Limit)
Agency for Toxic S U.S. Environmenta European Food Sa Environmental Pro Acute Exposure G U.S. Environmenta V.S. Environmenta Food Research Jo Hazardous Substa International Unifo National Institute o Australia National NIOSH (National In National Library of U.S. National Toxic	uideline Level(s) (AEGL(s)) al Protection Agency Federal Ins al Protection Agency High Produ urnal	ry (ATSDR) Database secticide, Fungicide, and action Volume Chemica ase (IUCLID) IITE) n and Assessment Sche and Health) CIP) NLM PUBMED)	d Rodenticide Act s	

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 Revision Note <u>Disclaimer</u> 02-February-2025 No information available.

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

spectrum

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
LI103	Lidocaine Hydrochloride, Monohydrate, 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: Spectrum-New Brunswick, NJ: 2020632 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 <u>qualityassurance@spectrumchemical.com</u>

Sincerely,

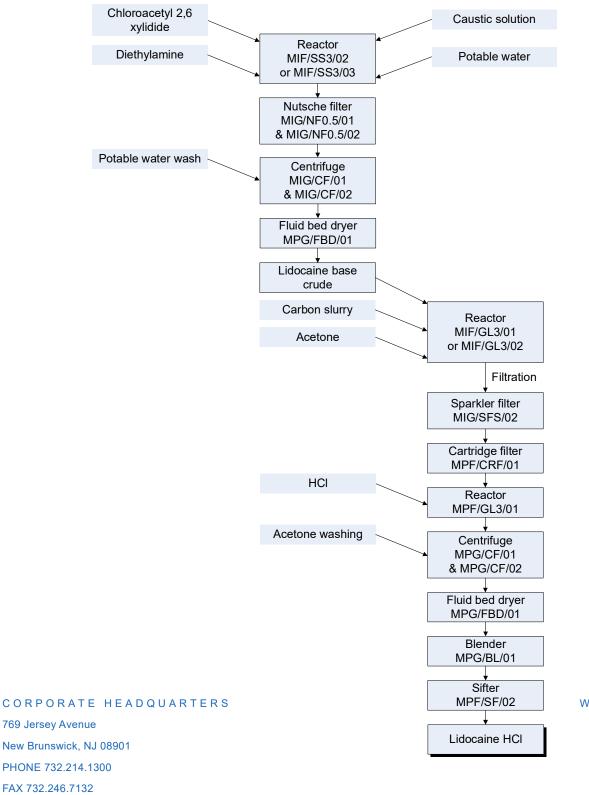
Oulu Clamy

Oralia Chavez Quality Assurance Specialist



Manufacturing Process Flowchart

Lidocaine Hydrochloride, Monohydrate, USP - LI103



WEST COAST FACILITY

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

LI103, Lidocaine Hydrochloride, Monohydrate, 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

• Cereals containing Gluten

spectrum

- Celery
- Mustard
- Sesame Seed
- Corn
- Sulfites > 10 ppm
- Soy

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 above mentioned catalog item 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
- Antibiotics
- Bisphenol A (BPA)
- CMR Substances

- Parabens
- Pesticides
- Phthalates
- Preservatives

spectrum®

RE: Elemental Impurities - Lidocaine Hydrochloride, Monohydrate, USP (Cat# LI103)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned material complies with the USP<232>, <233> Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. No Class 1, Class 2A, Class 2B or Class 3 elemental impurities are 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 <u>TechServices@spectrumchemical.com</u>.

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 PHONE 732.214.1300 FAX 732.246.7132

WEST COAST FACILITY

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

AN ISO 9001:2015 REGISTERED COMPANY

spectrum®

RE: Residual Solvents – Lidocaine Hydrochloride, Monohydrate, USP (Cat# LI103)

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
Acetone	2	< 890 ppm
Toluene	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 <u>TechServices@spectrumchemical.com</u>.

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 PHONE 732.214.1300 FAX 732.246.7132

WEST COAST FACILITY

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

AN ISO 9001:2015 REGISTERED COMPANY

spectrum®

RED: Flammable

GREEN: General Storage

BLUE: Health Hazard

WHITE: Corrosive

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.

4	Spectrum CHEMICAL MEG CORP LI103 D D 5 KG Lidocaine Hydrochloride (Lignocaine Hydrochloride) Monohydrate USP CAS 6108-05-0 CAUTION: For manufacturing, processing or repacking. Must be subject to further processing and testing during the preparation of injectable dosage forms. Read and understand the label and Safety Data Sheet (SDS) prior to use. Read and understand the label and Safety Data Sheet (SDS) prior to use.	Preserve in well-closed containers. Store at controlled roo temperature. Repackaged by Spectrum a
≣*		$\int \int dt = \int dt $
SPECTRUM CHEMICAI	www.SpectrumChemical.com	B 17/16GHS-A A Lot No. 06223 B • New Brunswick, NJ 08901
* J SPECTRUM CHEMICAL A Bar Code	www.SpectrumChemical.com	18 • New Brunswick, NJ 08901 (Contemporal Reprint Particular Reprint
 A Bar Code B GHS Hazard Pictograms 	www.SpectrumChemical.com L MFG. CORP. Gardena, CA 9024 Size/Quantity Chemical Abstracts Service	l8 • New Brunswick, NJ 08901
A Bar Code	www.SpectrumChemical.com L MFG. CORP. Gardena, CA 9024 Size/Quantity Chemical Abstracts Service (CAS) Registry Number	 New Brunswick, NJ 08901 Empirical Formula, Formula Weight and Technical
 Bar Code GHS Hazard Pictograms Warning, Safety Data and Precautiona 	www.SpectrumChemical.com L MFG. CORP. Gardena, CA 9024 Size/Quantity Chemical Abstracts Service (CAS) Registry Number	 New Brunswick, NJ 08901 Empirical Formula, Formula Weight and Technical Specifications Panel

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

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