

spectrum

chemicals & laboratory products

A Division of Spectrum Chemical Mfg. Corp.

Dear Customer,

This File Contains Both The ANSI Material Safety Data Sheet and The GHS Safety Data Sheet For The Same Product

Spectrum is currently transitioning all chemical product labeling from the ANSI¹ format to the GHS² format (see note below). In order to ensure that you receive complete labeling during the transition, we have included both the ANSI MSDS and the GHS SDS in a single file. The ANSI MSDS is given first, followed by the GHS SDS. Please use whichever matches the container label.

Why It Matters:

The complete precautionary labeling for this chemical consists of BOTH the label on the container AND the matching Material Safety Data Sheet (for ANSI labels) or Safety Data Sheet (for GHS labels). Both elements of the labeling [Label + (M)SDS] are written to be read and understood together, so as to provide complete precautionary information. It is intended for you to read and understood BOTH before handling or using the chemical.

Picking the Right One: 2 Easy Ways To Tell Whether Your Container Has an ANSI Label or a GHS Label

- 1) GHS labels: any pictogram displayed in the upper left-hand corner will be inside a red diamond. ANSI labels: pictograms, if present, will be inside individual black boxes.
- 2) GHS labels: on the bottom of the right-hand panel of the label, locate the Lot Number. Directly to the left will be a string of control characters, followed by a single letter. For GHS labels, the string of characters will end in "GHS:"

Label in ANSI Format

CAUTION!
MAY BE HARMFUL IF SWALLOWED
MAY CAUSE EYE AND SKIN IRRITATION
MAY AFFECT BEHAVIOR AND
METABOLISM

Do not taste or swallow. Avoid contact with eyes, skin and clothing. Avoid breathing mist or vapor. Avoid prolonged or repeated exposure. Use with adequate ventilation. Wash thoroughly after handling.

FIRST AID: In case of contact, flush affected area with plenty of water for at least 15 minutes. Remove contaminated clothing and/or jewelry. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If irritation persists, call a physician.

KEEP FROM CHILDREN

SPECTRUM
CHEMICALS & LABORATORY PRODUCTS

BE159 SIZ SY

Benzyl Benzoate
(Benzoic Acid Phenylmethyl Ester)

U.S.P.
CAS 120-51-4

CAUTION: For manufacturing, processing or repacking. Read and understand the label and Material Safety Data Sheet (MSDS) prior to use.
For chemical emergency, call (800)424-9300.

$C_{11}H_{12}O_2$ F.W. 212.24

Assay 99.0-100.5%
Specific Gravity $\pm 25^{\circ}C$ 1.116-1.120
Congealing Temperature Min. 18.0°C
Refractive Index $\pm 20^{\circ}C$ 1.565-1.570
Acidity To pass test

MAXIMUM LIMITS
Aldehyde 0.05%
Residual Solvents To pass test

FLUSHED WITH NITROGEN

Lot No. XQ###

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

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

Label in GHS Format

WARNING!

- May irritate or sensitize • May cause central nervous system effects based on animal data
- Do not breathe vapors • Wear protective gloves
- After handling
- **WASH AND DRY IMMEDIATELY!** Call a POISON CENTER or doctor/physician if you feel unwell. Avoid mouth.
- **KEEP FROM CHILDREN**

SPECTRUM

BE159 SIZ SY

Benzyl Benzoate

(Benzoic Acid Phenylmethyl Ester)

U.S.P.

CAS 129-51-4

CAUTION: For industrial use only. Do not use for food or feed. Do not use for medical purposes. Do not use for cosmetic purposes. Do not use for pharmaceutical purposes. Do not use for food or feed. Do not use for medical purposes. Do not use for cosmetic purposes. Do not use for pharmaceutical purposes.

Chemical Emergency: (800) 424-9086

www.SpectrumChemical.com

$C_{15}H_{14}O_2$ F.W. 212.24

Assay 99.0-100.5%

Specific Gravity @ 25°C 1.115-1.120

Freezing Temperature Min. 18.0°C

Refractive Index @ 20°C 1.568-1.570

Acidity To pass test

MAXIMUM LIMITS

Aldehyde 0.05%

Residual Solvents To pass test

LIGHT SENSITIVE: Keep tightly closed in light-resistant containers.

FLUSHED WITH NITROGEN

Lot No. XQ####

¹ American National Standards Institute

² Globally Harmonized System for Hazard Communication

Sincerely,

Regulatory Affairs

MATERIAL SAFETY DATA SHEET

NFPA	HMIS	Personal Protective Equipment
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Health Hazard	1
Fire Hazard	1
Reactivity	0



See Section 8.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code:	C2408
Product Name:	Citalopram Hydrobromide, USP
Chemical Name:	5-Isobenzofurancarbonitrile, 1-(3-(dimethylamino)propyl)-1-(4-fluorophenyl)-1,3-dihydro-, monohydrobromide
Synonyms:	Celexa Cipramil 1-[3-(Dimethylamino)propyl]-1-(4-fluorophenyl)-1,3-dihydro-5-isobenzofurancarbonitrile Hydrobromide
Recommended use:	Medication.
CAS #:	59729-32-7
Formula:	C ₂₀ H ₂₁ F-N ₂ -O.HBr
RTECS #	NP6406750
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Order Online At:	https://www.spectrumchemical.com
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Regina Wachenheim (East Coast)
Contact Person:	Martin LaBenz (West Coast)

2. HAZARDS IDENTIFICATION

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

May be harmful if swallowed
May cause skin and eye irritation
May cause irritation of respiratory tract

Odor:
No information available

Physical state:
Solid.

Appearance:
Powder.

Color:
White.

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:

May cause skin irritation.

Eye Contact:

Contact with eyes may cause irritation.

Inhalation:

May cause irritation of respiratory tract.

Ingestion:

May be harmful if swallowed. Ingestion may cause nausea, vomiting, and diarrhea. May cause loss of appetite. May cause abdominal pain. May cause gastritis. May cause difficulty swallowing. May cause salivation. May cause Cholitis. May cause central nervous system effects. It may affect the peripheral nervous system. It may affect the brain. It may affect the kidneys. May affect respiration. May affect the blood. May affect the liver. May cause musculoskeletal side effects. May affect the cardiovascular system.

Chronic Potential Health Effects:

Component

Citalopram Hydrobromide
59729-32-7 (100)

Carcinogen Status:

No information available

Target Organs:

Central nervous system.

Mutagenic Effects:

No information available

Teratogenic Effects:

May cause birth defects (teratogenic effects) based on animal test data
When administered in large quantities, at doses greater than human therapeutic doses:
Showed teratogenic effects in animal experiments
There are no adequate and well-controlled studies in humans
The data in humans were insufficient to evaluate the effects of exposure on development

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Citalopram Hydrobromide	59729-32-7	100

4. FIRST AID MEASURES

General Advice:	Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.
Notes to Physician:	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	No information available.
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Flash Point Tested according to:
Not available

Lower Explosion Limit (%):	No information available
Upper Explosion Limit (%):	No information available

Autoignition Temperature (°C/°F):	No information available
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Suitable Extinguishing Media: Carbon dioxide (CO₂). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide, Nitrogen oxides, Hydrogen bromide gas, Hydrogen fluoride

Specific hazards: May be combustible at high temperatures
Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
Specific Methods:	No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:

No information available.

Methods for Cleaning Up:

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Eye protection: Safety glasses. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Effective dust mask. Wear respirator with dust filter..

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Citalopram Hydrobromide - 59729-32-7	None	None	None	None

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
Citalopram Hydrobromide 59729-32-7	None	None	None	None

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Citalopram Hydrobromide 59729-32-7	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid.

Appearance:

Powder.

Color:

White.

Odor:

No information available

Molecular/Formula weight:

405.30

Taste

No information available

Flash point (°C):

No data available

Lower Explosion Limit (%):

No information available

Upper Explosion Limit (%):

No information available

Autoignition Temperature (°C/°F):

No information available

Melting point/range(°C/°F):

182-188 °C/359.6-370.4 °F

Boiling point/range(°C/°F):

No information available

pH:

No information available

Decomposition temperature(°C/°F):

No information available

Specific gravity:

No information available

Density (g/cm3):

No information available

Bulk density:

No information available

Vapor pressure @ 20°C (kPa):

No information available

Evaporation rate:

No information available

Vapor density:

No information available

VOC content (g/L):

No information available

Odor threshold (ppm):

No information available

Partition coefficient (n-octanol/water):

No information available

Miscibility:

No information available

Solubility:

Sparingly soluble in water
Soluble in Ethanol

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions
Conditions to avoid:	Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Incompatible Materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx). Hydrogen Bromide. Hydrogen fluoride.
Possibility of Hazardous Reactions:	No information available
Polymerization:	Hazardous polymerisation does not occur
Corrosivity:	No information available
Special Remarks on Corrosivity:	No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Citalopram Hydrobromide - 59729-32-7

LD50/oral/rat = 800 mg/kg

LD50/oral/mouse = 1000 mg/kg

LD50/dermal/rat = No information available

LD50/dermal/rabbit = No information available

LC50/inhalation/rat =

No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information

LC50/inhalation/rat No information available

LC50/Inhalation/mouse No information available

LD50/dermal/rabbit No information available

LD50/dermal/rat No information available

LD50/oral/mouse = 1000mg/kg

LD50/oral/rat = 800mg/kg

Local Effects

Skin irritation: May cause skin irritation.

Eye irritation: Contact with eyes may cause irritation.

Inhalation: May cause irritation of respiratory tract.

Ingestion:

May be harmful if swallowed. May cause abdominal pain. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause gastritis. May cause gastroenteritis. May cause dyspepsia. May cause difficulty swallowing. May cause thirst. May cause dehydration. May cause salivation. May cause flatulence. May cause hiccups and eructation (belching). May cause loss of appetite. May increase appetite. May cause taste perversion. May cause loss of taste. May cause stomatitis. May cause cholangitis. May cause cholecystitis, esophagitis, gingivitis. May cause hypokalemia. May cause hyponatremia. May cause hypoglycemia (low blood sugar). May cause yawning. It may affect the respiratory system (coughing, bronchitis, shortness of breath and difficulty breathing, pneumonia, asthma, laryngitis, bronchospasm, pneumonitis, sputum increase, rhinitis sinusitis). May affect the cardiovascular system (tachycardia, bradycardia, hypotension, cardiac failure). May affect the cardiovascular system (cardiac arrhythmias). May affect the cardiovascular system (hypertension). May affect the cardiovascular system (angina pectoris, myocardial infarction, cardiac arrest, myocardial ischemia, edema (extremities), extrasystoles, cerebrovascular accident, transient ischemic attack, phlebitis, atrial fibrillation). May cause migraine headaches. May affect the brain (degenerative changes). May affect behavior/Central Nervous system (excitement, anxiety, dizziness, vertigo, agitation, panic attacks, paranoia, insomnia, irritability, hostility, aggressiveness, impulsivity, anxiety, fatigue, depression, amnesia, apathy, impaired concentration, tremor, seizures, restlessness, hypomania, mania, melancholia, hallucination, confusion, euphoria, delusion, stupor, ataxia, abnormal gait, fainting, hypokinesia or hyperkinesia, hypertonia or dystonia, involuntary muscle contractions, abnormal coordination, increased risk of suicidal behavior in children, adolescents, young adults). May cause muscle weakness. May affect the peripheral nervous system (paresthesia - a tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles" generally of the hands and feet (extremities)), . May cause skin rash, redness or itching. May affect the urinary system (kidneys) and cause renal function impairment and difficulty urinating. May affect the urinary system (kidneys) and cause polyuria, urinary incontinence, or urinary retention. May affect the liver (increased hepatic enzymes). May cause pupillary dilation. May cause diplopia, photophobia, abnormal lacrimation). May cause drooping of eyelids (ptosis). May cause conjunctivitis and eye pain. May cause photosensitivity reaction, hives, dermatitis. May cause tinnitus.

Sensitization:

No information available

Chronic Toxicity

Chronic Toxicity

Prolonged or repeated ingestion may cause gastrointestinal symptoms similar to acute ingestion and may also cause gallstones, gastric ulcer, duodenal ulcer, gastroesophageal reflux, diverticulitis, hemorrhoids, rectal hemorrhage. Prolonged or repeated ingestion may cause loss of appetite. Prolonged or repeated ingestion may cause an increase in appetite. Prolonged or repeated ingestion may cause weight loss or weight gain. Prolonged or repeated ingestion may affect the central nervous system and cause symptoms similar to that of acute ingestion. Prolonged or repeated ingestion may affect the brain. Chronic exposure may affect the peripheral nervous system (paresthesia - a sensation of tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles) generally of the hands and feet (extremities). Prolonged or repeated ingestion may cause neuralgia, hypesthesia (decreased sensation). Prolonged or repeated ingestion may affect the liver (jaundice, liver function tests impaired). Prolonged or repeated ingestion may affect the liver (hepatitis). Prolonged or repeated ingestion may cause purpura (red or purple discolorations on the skin). Prolonged or repeated ingestion may cause dry skin, dermatitis, psoriasis, eczema, alopecia. Prolonged or repeated ingestion may cause muscle and skeletal pain (myalgia, arthralgia), arthritis, bursitis, osteoporosis. Prolonged or repeated ingestion may affect the blood (anemia, granulocytopenia, lymphocytosis, coagulation disorder, pulmonary embolism). Prolonged or repeated ingestion may affect the thyroid and result in thyroid hypofunction, goiter. Prolonged or repeated ingestion may cause decreased libido. It may also cause amenorrhea or dysmenorrhea, breast pain, breast enlargement or vaginal hemorrhage in women and ejaculation disorders, impotence, and gynecomastia in men.

Carcinogenic effects: Not considered carcinogenic.

Components	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Citalopram Hydrobromide	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects: No information available

Reproductive Effects: May cause adverse reproductive effects based on animal data
When administered in large quantities, at doses greater than human therapeutic doses:
Experiments have shown reproductive toxicity effects on laboratory animals
Even though there have been reports of decreased libido, amenorrhea or dysmenorrhea, breast pain, breast enlargement or vaginal hemorrhage in women and ejaculation disorders, impotence, and gynecomastia in men, there are no adequate and well-controlled studies in humans. Data in humans were insufficient to evaluate the effects on reproduction
It is excreted in human milk
There have been two reports of infants experiencing excessive somnolence, decreased feeding, and weight loss in association with breast feeding from a citalopram-treated mother. In one case, the infant was reported to recover completely upon discontinuation of citalopram by its mother, in the second case, no follow-up information was available

Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data. When administered in large quantities, at doses greater than human therapeutic doses:
Showed teratogenic effects in animal experiments. There are no adequate and well-controlled studies in humans. The data in humans were insufficient to evaluate the effects of exposure on development.

Target Organs: Central nervous system.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available

Ecotoxicity effects: No data available.

Aquatic toxicity: No information available

Mobility: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Citalopram Hydrobromide	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: None
Subsidiary Risk: Not applicable
Marine Pollutant No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

ADR

UN-No: No information available
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: No information available
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

ICAO

UN-No: No information available
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Citalopram Hydrobromide</i>	Not Listed	Not present	Not present	Not present	Not present	Not present	Present 261-890-6

U.S. Regulations**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.****Chemicals Known to the State of California to Cause Cancer:**

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)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Citalopram Hydrobromide	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
<i>Citalopram Hydrobromide</i>	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
<i>Citalopram Hydrobromide</i>	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Citalopram Hydrobromide	Not Listed	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Citalopram Hydrobromide	Not listed	Not listed

EU Classification

R-phrase(s)

R22 - Harmful if swallowed.

S -phrase(s)

S46 - If swallowed, seek medical advice immediately and show this container or label.

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

Indication of danger:

Xn - Harmful.

Xn



16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

Preparation Date: 23-Sep-2013

Reason for revision: Not applicable

Prepared by: Sonia Owen

Literature reference: No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

SAFETY DATA SHEET

Preparation Date: 9/23/2013

Revision Date: 9/23/2013

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: C2408
Product Name: Citalopram Hydrobromide, USP

Other means of identification

Synonyms: Celexa
Cipramil
1-[3-(Dimethylamino)propyl]-1-(4-fluorophenyl)-1,3-dihydro-5-isobenzofurancarbonitrile Hydrobromide
CAS #: 59729-32-7
RTECS # NP6406750
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Medication.
Uses advised against No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Regina Wachenheim (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Reproductive toxicity	Category 2

Label elements

Warning

Hazard statements

Harmful if swallowed

Suspected of damaging fertility or the unborn child



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use

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

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Citalopram Hydrobromide 59729-32-7	59729-32-7	100	*

4. FIRST AID MEASURES

First aid measures

General Advice:

Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact:

Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	May cause eye irritation. May cause skin irritation. Central nervous system effects. May affect the cardiovascular system. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhoea. Abdominal pain. Flatulence. Eructation (Belching). Hiccups. May cause salivation. Dehydration. May cause gastritis. May cause Cholititis. May cause hypoglycemia. May cause impairment of sense of taste. May cause bad taste. May cause loss of appetite. Paresthesia (numbness and tingling of the the extremities). Pupillary dilaton. Diplopia. Drooping of eyelids (ptosis). May cause tinnitus.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician:	Treat symptomatically
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Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:	Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.
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Unsuitable Extinguishing Media:	No information available.
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Specific hazards arising from the chemical

Hazardous Combustion Products:	Carbon monoxide; Carbon dioxide, Nitrogen oxides, Hydrogen bromide gas, Hydrogen fluoride
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Specific hazards:	May be combustible at high temperatures. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
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Special Protective Actions for Firefighters

Specific Methods:	No information available.
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Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.
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<u>Environmental precautions</u>	Prevent further leakage or spillage if safe to do so.
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Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.
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Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE**Precautions for safe handling****Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****National occupational exposure limits**

U.S Occupational Exposure Limits: Not determined

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Citalopram Hydrobromide - 59729-32-7	None	None	None	None

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
Citalopram Hydrobromide - 59729-32-7	None	None	None	None

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Citalopram Hydrobromide 59729-32-7	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment**Personal Protective Equipment**

Eye protection:	Safety glasses. Safety glasses with side-shields.
Skin and body protection:	Long sleeved clothing. Chemical resistant apron. Gloves.
Respiratory protection:	Effective dust mask. Wear respirator with dust filter..
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.	Appearance: Powder.	Color: White.
Odor: No information available	Taste No information available	Formula: C20-H21-F-N2-O.HBr
Molecular/Formula weight: 405.30	Flash point (°C): Not applicable	Flashpoint (°C/°F): Not applicable
Flash Point Tested according to: Not applicable	Lower Explosion Limit (%): No information available	Upper Explosion Limit (%): No information available
Autoignition Temperature (°C/°F): No information available	pH: No information available	Melting point/range(°C/°F): 182-188 °C/359.6-370.4 °F
Boiling point/range(°C/°F): No information available	Decomposition temperature(°C/°F): No information available	Specific gravity: No information available
Density (g/cm3): No information available	Bulk density: No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Sparingly soluble in water Soluble in Ethanol	

10. STABILITY AND REACTIVITY**Reactivity**

No information available

Chemical stability

Stability: Stable at normal conditions

Product code: C2408

Product name: Citalopram
Hydrobromide, USP

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Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Incompatible Materials: Strong oxidizing agents.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx). Hydrogen Bromide. Hydrogen fluoride.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Numerical measures of toxicity Product Information

Acute Toxicity

Component Information

Citalopram Hydrobromide - 59729-32-7

LD50/oral/rat = 800 mg/kg

LD50/oral/mouse = 1000 mg/kg

LD50/dermal/rabbit =

No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat =

No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information =

No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 800mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 1000mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat**VALUE-Vapor** = No information available**VALUE-Gas** = No information available**VALUE-Dust/Mist** = No information available**LC50/Inhalation/mouse****VALUE-Vapor** = No information available**VALUE - Gas** = No information available**VALUE - Dust/Mist** = No information available**Symptoms****Skin Contact:** May cause skin irritation.**Eye Contact:** Contact with eyes may cause irritation.**Inhalation****Ingestion**

May cause irritation of respiratory tract.

Harmful if swallowed. May cause abdominal pain. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause gastritis. May cause gastroenteritis. May cause dyspepsia. May cause difficulty swallowing. May cause thirst. May cause dehydration. May cause salivation. May cause flatulence. May cause hiccups and eructation (belching). May cause loss of appetite. May increase appetite. May cause taste perversion. May cause loss of taste. May cause stomatitis. May cause cholitis. May cause cholecystitis, esophagitis, gingivitis. May cause hypokalemia. May cause hyponatremia. May cause hypoglycemia (low blood sugar). May cause yawning. It may affect the respiratory system (coughing, bronchitis, shortness of breath and difficulty breathing, pneumonia, asthma, laryngitis, bronchospasm, pneumonitis, sputum increase, rhinitis sinusitis). May affect the cardiovascular system (tachycardia, bradycardia, hypotension, cardiac failure). May affect the cardiovascular system (cardiac arrhythmias). May affect the cardiovascular system (hypertension). May affect the cardiovascular system (angina pectoris, myocardial infarction, cardiac arrest, myocardial ischemia, edema (extremities), extrasystoles, cerebrovascular accident, transient ischemic attack, phlebitis, atrial fibrillation). May cause migraine headaches. May affect the brain (degenerative changes). May affect behavior/Central Nervous system (excitement, anxiety, dizziness, vertigo, agitation, panic attacks, paranoia, insomnia, irritability, hostility, aggressiveness, impulsivity, anxiety, fatigue, depression, amnesia, apathy, impaired concentration, tremor, seizures, restlessness, hypomania, mania, melancholia, hallucination, confusion, euphoria, delusion, stupor, ataxia, abnormal gait, fainting, hypokinesia or hyperkinesia, hypertonia or dystonia, involuntary muscle contractions, abnormal coordination, increased risk of suicidal behavior in children, adolescents, young adults). May cause muscle weakness. May affect the peripheral nervous system (paresthesia - a tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles" generally of the hands and feet (extremities)), . May cause skin rash, redness or itching. May affect the urinary system (kidneys) and cause renal function impairment and difficulty urinating. May affect the urinary system (kidneys) and cause polyuria, urinary incontinence, or urinary retention. May affect the liver (increased hepatic enzymes). May cause pupillary dilation. May cause diplopia, photophobia, abnormal lacrimation). May cause drooping of eyelids (ptosis). May cause conjunctivitis and eye pain. May cause photosensitivity reaction, hives, dermatitis. May cause tinnitus.

Aspiration hazard No information available**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Chronic Toxicity

Prolonged or repeated ingestion may cause gastrointestinal symptoms similar to acute ingestion and may also cause gallstones, gastric ulcer, duodenal ulcer, gastroesophageal reflux, diverticulitis, hemorrhoids, rectal hemorrhage. Prolonged or repeated ingestion may cause loss of appetite. Prolonged or repeated ingestion may cause an increase in appetite. Prolonged or repeated ingestion may cause weight loss or weight gain. Prolonged or repeated ingestion may affect the central nervous system and cause symptoms similar to that of acute ingestion. Prolonged or repeated ingestion may affect the brain. Chronic exposure may affect the peripheral nervous system (paresthesia - a sensation of tingling, pricking, or numbness of the skin (known as the feeling of "pins and needles) generally of the hands and feet (extremities). Prolonged or repeated ingestion may cause neuralgia, hypesthesia (decreased sensation). Prolonged or repeated ingestion may affect the liver (jaundice, liver function tests impaired). Prolonged or repeated ingestion may affect the liver (hepatitis). Prolonged or repeated ingestion may cause purpura (red or purple discolorations on the skin). Prolonged or repeated ingestion may cause dry skin, dermatitis, psoriasis, eczema, alopecia. Prolonged or repeated ingestion may cause muscle and skeletal pain (myalgia, arthralgia), arthritis, bursitis, osteoporosis. Prolonged or repeated ingestion may affect the blood (anemia, granulocytopenia, lymphocytosis, coagulation disorder, pulmonary embolism). Prolonged or repeated ingestion may affect the thyroid and result in thyroid hypofunction, goiter. Prolonged or repeated ingestion may cause decreased libido. It may also cause amenorrhea or dysmenorrhea, breast pain, breast enlargement or vaginal hemorrhage in women and ejaculation disorders, impotence, and gynecomastia in men.

Sensitization: No information available

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Citalopram Hydrobromide	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity

Suspected of damaging fertility or the unborn child

Reproductive Effects: May cause adverse reproductive effects based on animal data. When administered in large quantities, at doses greater than human therapeutic doses: Experiments have shown reproductive toxicity effects on laboratory animals. Even though there have been reports of decreased libido, amenorrhea or dysmenorrhea, breast pain, breast enlargement or vaginal hemorrhage in women and ejaculation disorders, impotence, and gynecomastia in men, there are no adequate and well-controlled studies in humans. Data in humans were insufficient to evaluate the effects on reproduction. It is excreted in human milk. There have been two reports of infants experiencing excessive somnolence, decreased feeding, and weight loss in association with breast feeding from a citalopram-treated mother. In one case, the infant was reported to recover completely upon discontinuation of citalopram by its mother, in the second case, no follow-up information was available.

Developmental Effects: No information available

Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data. When administered in large quantities, at doses greater than human therapeutic doses: Showed teratogenic effects in animal experiments. There are no adequate and well-controlled studies in humans. The data in humans were insufficient to evaluate the effects of exposure on development.

Specific Target Organ Toxicity

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STOT - single exposure No information available
STOT - repeated exposure No information available
Target Organs: Central nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Citalopram Hydrobromide	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: Not applicable
Packing Group: None
Marine Pollutant: No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

ADR

Product code: C2408

Product name: Citalopram
Hydrobromide, USP

14. TRANSPORT INFORMATION

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Classification Code: No information available
Description: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Citalopram Hydrobromide</i>	Not Listed	Not present	Not present	Not present	Not present	Not present	Present 261-890-6

U.S. Regulations

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California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**Chemicals Known to the State of California to Cause Cancer:**

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)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Citalopram Hydrobromide	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
<i>Citalopram Hydrobromide</i>	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
<i>Citalopram Hydrobromide</i>	Not Applicable	Not Applicable

Canada**WHMIS hazard class:**

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Citalopram Hydrobromide	Not Listed	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Citalopram Hydrobromide	Not listed	Not listed

EU Classification**R-phrases)**

R22 - Harmful if swallowed.

S -phrase(s)

S46 - If swallowed, seek medical advice immediately and show this container or label.

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

Indication of danger:

Xn - Harmful.

Xn

**16. OTHER INFORMATION**

NFPA	HMIS	Personal Protective Equipment
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Health Hazard	1
Fire Hazard	1
Reactivity	0

**See Section 8.**

Preparation Date: 9/23/2013
Revision Date: 9/23/2013
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Material Safety Data Sheet