



SAFETY DATA SHEET

Preparation Date: 3/24/2016 Revision Date: Not Applicable Revision Number: Not Applicable

1. IDENTIFICATION

Product identifier

Product code: P1729

Product Name: PROCAINAMIDE HYDROCHLORIDE, USP

Other means of identification

Synonyms: Amidoprocain

p-Amino-N-(2-(diethylamino)ethyl)benzamide hydrochloride 4-Amino-N-(2-(diethylamino)ethyl)benzamide monohydrochloride

Novocamid hydrochloride Procainamide hydrochloride Procaine amide hydrochloride Procan-SR hydrochloride Procapan hydrochloride Procardyl hydrochloride Pronestyl hydrochloride

Supicane amide hydrochloride

CAS #: 614-39-1 RTECS # CV2295000 CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Medication.

Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp

14422 South San Pedro St.

Gardena, CA 90248 (310) 516-8000

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

Emergency telephone numberChemtrec 1-800-424-9300Contact Person:Martin LaBenz (West Coast)Contact Person:Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| Acute toxicity - Oral | Category 4 |
|---------------------------|------------|
| Skin corrosion/irritation | Category 2 |

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| Serious eye damage/eye irritation | Category 2A |
|--|-------------|
| Specific target organ toxicity (single exposure) | Category 3 |

Label elements

Warning

Hazard statements

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves

Wear eye/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name: Procainamide Hydrochloride

| Components | CAS-No. | Weight % |
|------------|---------|----------|

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| 3. COMPOSITION/INFORMATION ON INGREDIENTS | | | | | | | |
|---|----------|-----|--|--|--|--|--|
| Procainamide Hydrochloride | 614-39-1 | 100 | | | | | |
| 614-39-1 | | | | | | | |

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call 1-800-222-

1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention.

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 Irritating to eyes and skin. Irritating to respiratory system. Ingestion may cause nausea,

vomiting, and diarrhea. Bitter taste in mouth. May cause loss of appetite. Joint pain.

Weakness. May cause decreased urination. May affect the cardiovascular system. Weak, rapid pulse or rapid heart rate (Tachycardia). Cardiac arrhythmias. It may affect the blood. It may cause blood disorders such as leukopenia, thrombocytopenia, and agranulocytosis. Central

nervous system depression. Central nervous system effects.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

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: Dry chemical. Carbon dioxide (CO2). Water spray mist or

foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide; nitrogen oxides;

hydrogen chloride gas

Specific hazards: May be combustible at high temperatures

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch

damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use personal protective equipment.

Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering

drains. Prevent entry into waterways, sewers, basements or confined areas.

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.

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. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapors/dust. Keep away from heat and sources of ignition. 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. Protect from light. Sensitive to light. Store in light-resistant containers. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Jimou Jimos | | | | |
|----------------------------|------|-------|-------|------------|
| Components | OSHA | NIOSH | ACGIH | AIHA WHEEL |
| Procainamide Hydrochloride | None | None | None | None |
| 614-39-1 | | | | |

Canada

| Components | Alberta | British Columbia | Ontario | Quebec |
|-------------------------------------|---------|------------------|---------|--------|
| Procainamide Hydrochloride 614-39-1 | None | None | None | None |

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Australia and Mexico

| Components | Australia | Mexico |
|----------------------------|-----------|--------|
| Procainamide Hydrochloride | None | None |
| 614-39-1 | | |

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: Goggles

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

Respiratory protection: Effective dust mask. Use a dust respirator under conditions where exposure to the

substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering

controls are not feasible. Be sure to use an approved/certified respirator or

equivalent. .

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

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:Appearance:Color:SolidPowder.White to tan.

Odor: Taste Formula:

Molecular/Formula weight: Flammability: Flashpoint (°C/°F):

No information available No information available.

Flash Point Tested according to: Autoignition Temperature (°C/°F): Lower Explosion Limit (%):

Not available No information available No information available

Upper Explosion Limit (%): pH: Melting point/range(°C/°F):

No information available 5 - 6.5 (10% in water) 157 - 170 °C (315 - 338 °F)

Decomposition temperature(°C/°F): Boiling point/range(°C/°F): Bulk density:

>400 °C No information available No information available

Density (g/cm3): Specific gravity: Vapor pressure @ 20°C (kPa):

No information available
No information available
No information available

Evaporation rate: Vapor density: VOC content (g/L):
No information available

No information available

Odor threshold (ppm): Partition coefficient Viscosity:

No information available (n-octanol/water): No information available

No information available

Miscibility: Solubility: No information available Soluble in Water

Slightly soluble in alcohol Insoluble in Acetone

Insoluble in Petroleum ether

10. STABILITY AND REACTIVITY

Reactivity

Reactive with strong oxidizing agents

Chemical stability

Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Exposure to light. Incompatible materials.

Incompatible Materials: Strong oxidizing agents.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx). Hydrogen chloride gas.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

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Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

Procainamide Hydrochloride - 614-39-1

LD50/oral/rat = 1509 mg/kg Oral LD50 Rat

LD50/oral/mouse = 1110 mg/kg

LD50/dermal/rabbit = No information available LD50/dermal/rat = No information available LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 1509mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 1110mg/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: Causes skin irritation. Moderately irritating to the skin.

Eye Contact: Causes eye irritation. Moderately irritating to the eyes. Causes conjunctival irritation.

Inhalation Irritating to respiratory system

Ingestion Harmful if swallowed. May cause digestive (gastointestinal) tract irritation. Ingestion

may cause nausea, vomiting, diarrhea. May cause loss of appetite. May cause weakness. May affect behavior/central nervous system (somnolence, tremor,

hallucinations). May affect behavior/central nervous system (convulsions). May affect behavior/central nervous system (dizziness, drowsiness). May affect behavior/central nervous system (ataxia). May cause fainting. It may affect the joints. May affect the blood (thrombocytopenia). May affect the cardiovascular system (tachycardia). May

affect the cardiovascular system (cardiac arrhythmias).

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Ingestion: May also cause other blood disorders such as leukopenia, and agranulocytosis.

May also cause decreased urination. May also cause bitter taste in mouth

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 skin contact may cause dermatitis, and dryness and cracking

of the skin.

Sensitization: May cause sensitization by skin contact

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic

| Components | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|-------------------------------|------------|------------------------|------------|---------------------------|--|--|
| Procainamide Hydrochloride | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

Reproductive toxicity No data is available

Reproductive Effects:

Developmental Effects:

Teratogenic Effects:

No information available
No information available

Specific Target Organ Toxicity

STOT - single exposure STOT - repeated exposure

Target Organs:

Respiratory system.

No information available

No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

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Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

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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 |
|----------------------------|---------------------------|---------------------------|------------------------------|------------------------|
| Procainamide Hydrochloride | None | None | None | None |

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
No information available
No information available

Packing Group: None

ERG No: No information available

Marine Pollutant No data available

DOT RQ (lbs):

Special Provisions
Symbol(s):

No information available
No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No Information available

ADR

UN-No: Not Regulated

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

IMO / IMDG

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No information available

RID

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:

No information available
No information available
No information available

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14. TRANSPORT INFORMATION

ICAO

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:

No information available
No information available
No information available

IATA

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
ERG Code:
No information available

15. REGULATORY INFORMATION

International Inventories

| Components | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | CHINA | Australia (AICS) | EINECS-No. |
|----------------------------|-----------|-------------|------------------------|-------------|-------------|---------------------|-------------------|
| Procainamide Hydrochloride | Present | Not present | Not present | Not present | Not present | Present | Present 210-381-7 |

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: |
|----------------------------|------------|------------------------|-------------------------------|-------------------------------|
| Procainamide Hydrochloride | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| • | Substances and their | Hazardous | Section 302 Extremely Hazardous Substances and RQs | Chemical Category | Section 313 - Reporting de minimis |
|-------------------------------|----------------------|-----------|--|--------------------------|------------------------------------|
| Procainamide Hydrochloride | None | None | None | None | None |

U.S. TSCA

| · · · · · · · · · · · · · · · · · · · | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|---------------------------------------|--|--|
| Procainamide Hydrochloride | Not Applicable | Not Applicable |

Canada

WHMIS hazard class:

D2B Toxic materials

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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) |
|----------------------------|--------------|---------------|
| Procainamide Hydrochloride | Not Listed | Present |

| Components | CEPA Schedule I - Toxic Substances | |
|----------------------------|------------------------------------|--|
| Procainamide Hydrochloride | Not listed | |

| Components | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting | |
|----------------------------|---|--|
| Procainamide Hydrochloride | Not listed | |

EU Classification

R-phrase(s)

R22 - Harmful if swallowed.

R36/37/38 - Irritating to eyes, respiratory system and skin.

S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37 - Wear suitable gloves.

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

| Components | Classification | Concentration Limits: | Safety Phrases |
|----------------------------|----------------|-----------------------|----------------|
| Procainamide Hydrochloride | | No information | |

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

Indication of danger:

Xi - Irritant. Xn - Harmful.





16. OTHER INFORMATION

Product code: P1729 Product name: PROCAINAMIDE 11 / 12 HYDROCHLORIDE, USP

16. OTHER INFORMATION

Preparation Date:3/24/2016Revision Date:Not ApplicablePrepared by:Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) 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 SDS. The physical properties reported in this SDS 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 SDS 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 Safety Data Sheet

Product code: P1729 Product name: PROCAINAMIDE 12 / 12