

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Cacodylic Acid

Other means of identification

Product Code(s) A2304

UN/ID no. 1572

Synonyms No information available

Product Use For Laboratory Research Use Only.

Supplier/Manufacturer

Biomatik Corporation
9-140 McGovern Dr.
Cambridge, Ontario N3H 4R7
Canada

Telephone Number 1-519-489-7195

E-mail Address info@biomatik.com

Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

| | |
|-----------------------------|-------------|
| Acute Toxicity - Oral | Category 3 |
| Acute Toxicity - Inhalation | Category 3 |
| Carcinogenicity | Category 1A |

Label elements

Emergency Overview

Danger

Hazard statements

H301 - Toxic if swallowed

H331 - Toxic if inhaled

H315 - Causes skin irritation

H351 - May cause cancer



Appearance Powder

Physical State Solid

Odor No information available

Precautionary Statements - Prevention

Obtain special instructions before use

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

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

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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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

Hazards not otherwise classified (HNOC)

Not regulated

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | EC No. | Weight % | Trade Secret |
|-----------------|---------|-----------|----------|----------------|
| Cacaodylic acid | 75-60-5 | 200-883-4 | 95-100 | Not applicable |

4. FIRST AID MEASURES

First Aid Measures

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

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation Move to fresh air. If not breathing, give artificial respiration.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

In case of fire: Use CO₂, dry chemical, or foam for extinction

Unsuitable Extinguishing Media Contact with water liberates toxic, highly flammable gas. DO NOT USE WATER

Specific Hazards Arising from the Chemical

Highly flammable

Hazardous Combustion Products Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective Equipment and Precautions 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 protection Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental Precautions

Environmental Precautions See Section 12 for additional Ecological information.

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 Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products No information.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------|-----------|-------------------------------|------------|
| Cacodylic acid | - | TWA: 0.5 mg/m ³ As | - |

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-------------------------------------|--------------------------|--------------------------------|--------------------------|
| Physical State | Solid | Odor | May be unpleasant |
| Appearance | Powder | Odor Threshold | No information available |
| Color | No information available | | |
| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> | |
| pH | No information available | | |
| Melting point/freezing point | 195.0 °C | | |
| Boiling Point/Range | 253.1 °C | | |
| Flash Point (High in °C) | 109.4 °C | | |
| Evaporation Rate | No information available | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limit in Air | | | |
| Upper flammability limit: | No information available | | |
| Lower flammability limit: | No information available | | |
| Vapor pressure | 0.0 | | |
| Vapor Density | No information available | | |
| Specific Gravity | No information available | | |
| Water Solubility | No information available | | |
| Solubility in other solvents | No information available | | |
| Partition coefficient | 0.36 | | |
| Autoignition Temperature | No information available | | |
| Decomposition Temperature | No information available | | |
| Kinematic viscosity | No information available | | |
| Dynamic viscosity | No information available | | |
| Explosive Properties | No information available | | |
| Oxidizing Properties | No information available | | |
| <u>Other Information</u> | | | |
| Softening Point | No information available | | |
| Molecular Weight | No information available | | |
| VOC Content | No information available | | |
| Density | No information available | | |
| Bulk Density | No information available | | |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Contact with water liberates toxic, highly flammable gas.

Conditions to Avoid

Exposure to air or moisture over prolonged periods.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Inhalation | There is no data available for this product. |
| Eye Contact | There is no data available for this product. |
| Skin Contact | There is no data available for this product. |
| Ingestion | There is no data available for this product. |

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|----------------|-----------|-------------|-----------------|
| Cacodylic acid | - | - | - |

Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.
Mutagenic Effects No information available.
Carcinogenicity No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|----------------|-------|---------------------|-----|------|
| Cacodylic acid | - | Group 1 Group 2B | - | X |

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organ Effects No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Toxicity to Fish | Crustacea |
|----------------|----------------------|------------------|-----------|
| Cacodylic acid | - | - | - |

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

| Chemical Name | Partition coefficient |
|----------------|-----------------------|
| Cacodylic acid | - |

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging Do not re-use empty containers.

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|----------------|------|--------------------------|------------------------|------------------------|
| Cacodylic acid | - | - | - | - |

| Chemical Name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|----------------|--------------------------------------|------------------------|------------------------|------------------------|
| Cacodylic acid | - | - | - | - |

| Chemical Name | California Hazardous Waste Status |
|----------------|-----------------------------------|
| Cacodylic acid | - |

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1572
 Proper shipping name Cacodylic acid
 Hazard Class 6.1
 Packing Group II

IATA

UN/ID no. 1572
 Proper shipping name Cacodylic acid
 Hazard Class 6.1
 Packing Group II

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDSL Complies
 EINECS/ELINCS Complies
 ENCS Complies
 IECSC Does not Comply
 KECL Does not Comply
 PICCS Complies
 AICS Complies

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 Commercial Chemical Substances/EU 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
 AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Component | SARA 313 - Threshold Values % |
|----------------|-------------------------------|
| Cacodylic acid | - |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

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)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|----------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Cacodylic acid | - | X | - | - |

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

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|----------------|--------------------------|------------------------------------|----|
| Cacodylic acid | | - | - |

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

| Chemical Name | California Prop. 65 |
|----------------|---------------------|
| Cacodylic acid | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|----------------|------------|---------------|--------------|
| Cacodylic acid | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION**Disclaimer**

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet

