

## **MATERIAL SAFETY DATA SHEET**

# 0 ppb microcystin

# Section 1: Chemical and Company Identification

Product Name: 0 ppb microcystin

Other identifiers: 0 ppb microcystin, 0.1 ppb microcystin, 0.3 ppb microcystin, 0.8 ppb microcystin, 1.0

ppb microcystin, 2.0 ppb microcystin, 5.0 ppb microcystin

**Recommended use:** Laboratory Chemicals

Company Identification: Attogene Corporation

3913 Todd Lane Suite 310 Austin, Texas 78744

**Emergency Number:** 512-333-1330

Revision date: N/A

Section 2: Hazards Identification

**GHS Classification** 

Signal Word: Danger



Flammable Liquid 2 H225 Highly flammable liquid and vapor.



Acute Toxicity 3 H331 Toxic if inhaled. H301 Toxic if Swallowed. H311 Toxic in contact with skin.



STOT SE 1 H370 Causes damage to organs.

#### **Precautionary statements:**

#### Prevention:

P264- Wash face, hands, and any exposed skin thoroughly after handling.

P270- Do not eat, drink, or smoke when using this product.

P280- Wear protective gloves/protective clothing/eye protection/face protection.

P271- Use only outdoors or in a well ventilated area.

P260- Do not breathe dust/fumes/gas/mist/vapors/spray

P210- Keep away from heat/sparks/open flames/hot surfaces. No Smoking.

P233- Keep container tightly closed.

P240- Ground/bond container and receiving equipment.

P241- Use explosion-proof electrical/ventilating/lighting/equipment.

P242- Use only non-sparking tools.

P243- Take precautionary measures against static discharge.

P235- Keep cool.

#### Response:

#### General

P308+P311- IF EXPOSED: Call a POISON CENTER or doctor/physician

#### Inhalation

P304+P340+P311- IF INHALED: Remove victim to fresh air and keep in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

#### Skin

P303+P361+P353+P364+P312- IF ON SKIN (or hair): Immediately remove all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Ingestion

P301+P310+P330- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse Mouth.

#### Fire

P370+P378- In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction.

# Storage:

P405- Store locked up.

P403+P233- Store in a well-ventilated place. Keep container tightly closed.

#### Disposal:

P501- Dispose of contents/container to an approved waste disposal plant.

#### Other classification Systems:

NFPA ratings (scale 0-4):

Health= 1

Fire= 3

Reactivity= 0

HMIS ratings (scale 0-4)

Health= 2

Fire= 3

Reactivity= 0

#### Other hazards:

PBT: N/A vPvB: N/A

#### Section 3: Composition/information on ingredients

Chemical characterization: mixture

Hazardous components:

CAS# Chemical Name % EC#

67-56-1 Methanol 1-10 200-659-6

#### Section 4: First Aid Measures

#### General information:

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing has been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

#### If inhaled:

Supply fresh air or oxygen and seek medical attention.

#### In case of skin contact:

Immediately wash skin with soap and copious amounts of water and rinse thoroughly.

## In case of eye contact:

Flush eyes with copious amounts of water for at least fifteen minutes. Assure adequate flushing by separating eyelids with fingers. Seek medical attention.

## If ingested:

Do not induce vomiting. Seek immediate medical attention.

# Most important symptoms/effects, acute and delayed:

Information not available

Indication of immediate medical attention and special treatment needed:

Information not available.

## Section 5: Fire Fighting Measures

#### Suitable extinguishing media:

CO<sub>2</sub>, extinguishing powder or water spray. Fight large fires with water spray or alcohol resistant foam.

## Special hazards arising from substance or mixture:

N/A

- Advice for firefighters
- **Protective equipment:** Mouth respiratory protective device.

#### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

## • Environmental precautions:

Dilute with plenty of water.

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits, and cellars.

Inform appropriate authorities of any contact with water course and/or sewage system.

## Methods and materials for containment and cleaning up:

Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust, etc.).

Dispose of contaminated materials as waste according to item 13 (Disposal considerations). Ensure adequate ventilation.

#### Section 7: Handling and Storage

# • Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Keep ignition source away- do not smoke.

Protect against electrostatic charges.

Keep respiratory protective devices available.

- Conditions for safe storage, including any incompatibilities:
- Requirements to be met by storerooms and receptacles:

Store in a cool location.

• Information about storage in one common storage facility:

Not required.

#### Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

# Section 8: Exposure Controls/Personal Protection

#### Control Parameters

# Components with limit values that require monitoring at the workplace: 67-56-1 Methanol

PEL 260 mg/m<sup>3</sup>, 200 ppm

REL Short-term value: 325 mg/m<sup>3</sup>, 250 ppm Long-term value: 260 mg/m<sup>3</sup>, 200 ppm

TLV Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm

Skin; BEI

#### Components with biological limit values:

## **67-56-1 Methanol**

BEI 15 mg/L Medium: urine

Time: end of shift

Parameter: Methanol (background, nonspecific)

**Additional information:** The lists that were valid during the creation were used as basis.

Appropriate engineering controls: Information not available.

# • Individual protection measures:

#### General protective and hygienic measures:

Keep away from food, beverages, and feed.

Immediately remove contaminated clothing.

Wash hands before breaks and at end of shift.

Store protective clothing in a separate, designated area.

Avoid contact with eyes and skin.

# **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device.

In case of intensive or long term exposure use respiratory device independent of circulating air.

# **Eye Protection:**

Protective eyeglasses or chemical safety goggles should be worn when handling.

#### Skin and body Protection:

Wear appropriate gloves and clothing to prevent skin exposure.

## Section 9: Physical and Chemical Properties

Physical state: LiquidColor: Colorless

• Odor: Alcohol-like

• Odor threshold: No information available

pH: No information available

Melting point/range: No information availableBoiling point/range: No information available

• Flash point: No information available

• Evaporation rate: No information available

• Flammability (solid, gaseous): N/A

 Upper/ Lower explosive limits: Lower: No information available

Lower: No information available Upper: No information available

• Vapor pressure (at 20 °C): No information available

Vapor density: No information available
Relative density: Information not available

Solubility(ies):
 Water: Fully miscible

• Partition coefficient(n-octanol/water): Information not available

• Autoignition temperature: No information available

• Decomposition temperature: Information not available

## Section 10: Stability and Reactivity

#### • Chemical Stability:

Stable under normal conditions.

## • Possibility of hazardous reactions:

No hazardous reactions known.

#### • Conditions to avoid:

Keep away from open flame, hot surfaces, heat sources, and sources of ignition.

# Incompatible materials:

Strong oxidizing agents

Strong acids

Acid anhydrides

Acid chlorides

Strong bases

Metals

Peroxides

#### • Hazardous decomposition products:

Carbon monoxide Formaldehyde

#### Section 11: Toxicological Information

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated. The following refers to the hazardous ingredient(s) of the product. Other harmful effects cannot be excluded.

# Acute toxicity LD/LC 50 values:

67-56-1 Methanol

Oral LD50: 6200 mg/kg (Rat)

Dermal LD50: 15800 mg/kg (Rabbit) Inhalation LC50: 22500 ppm (Rat) 8 h

## Chronic Toxicity

Irritation:

Irritating to eyes and skin.

Sensitization:

No known sensitization effects.

Carcinogenicity:

No carcinogenic chemicals present.

Mutagenic effects:

Mutagenic effects have occurred in test animals.

Reproductive effects:

Reproductive effects seen in test animals.

**Developmental effects:** 

Developmental effects seen in experimental animals. Substance is listed on California Proposition 65 as a developmental hazard.

Teratogenicity:

Teratogenic effects seen in experimental animals.

#### Section 12: Ecological Information

Aquatic toxicity:

Information not available

• Terrestrial toxicity:

Information not available

• Persistence and degradability:

Readily biodegradable

• Bioaccumulative potential:

Information not available

• Mobility in soil:

Information not available

• Other adverse effects:

Information not available

## Section 13: Disposal Considerations

- Should not be released into the environment.
- Dispose in accordance with all federal, state and local environmental regulations.

# Section 14: Transport Information

**UN-Number** 

DOT, ADR, ADN, IMDG, IATA:

Void

UN proper shipping name DOT, ADR, ADN, IMDG, IATA:

Void

Transport hazard class

DOT, ADR, ADN, IMDG, IATA:

Void

Packing group

DOT, ADR, ADN, IMDG, IATA:

Void

**Environmental hazards** 

**Marine Pollutant:** 

No

# Special precautions for user:

N/A

# Section 15: Regulatory Information

N/A

# Section 16: Other Information

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This document is believed to be accurate, but does not purport to be all-inclusive and should be used only as a guide. Attogene Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should be not be confused with state, municipal, or insurance requirements, and constitutes NO WARRANTY.



## **MATERIAL SAFETY DATA SHEET**

# Microcystin Enzyme Conjugate Microcystin HRP

Section 1: Chemical and Company Identification

Product Name: Microcystin Enzyme Conjugate Microcystin HRP

Recommended use: Laboratory chemicals

**Company Identification:** Attogene Corporation 3913

Todd Lane Suite 310 Austin,

Texas 78744

**Emergency Number:** 512-333-1330

**Revision Date: N/A** 

Section 2: Hazards Identification

**GHS Classification:** 

Signal Word: Warning



Skin irrit. 2 H315 Causes skin irritation.

Eye irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

**Precautionary statements:** 

Prevention:

P261- Avoid breathing dust/fumes/gas/mist/vapors.

Response: General

P312- Call a POISON CENTER or doctor/physician if you feel unwell.

#### Skin

P302+P352- IF ON SKIN: Wash with plenty of soap and water.

#### Inhalation

P304+P340- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

#### Eyes

P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## Other Classification Systems:

```
NFPA ratings (scale 0-4):

Health= 1

Fire= 0

Reactivity= 0

HMIS ratings (scale 0-4)

Health= Not available

Fire= Not available

Reactivity= Not available
```

Other hazards:

PBT: N/A vPvB: N/A

#### Section 3: Composition/information on ingredients

Chemical characterization: Mixture

Hazardous components:

<u>CAS#</u> <u>Chemical Name</u> <u>%</u> <u>EC#</u>

1185-53-1 1,3-propanediol,2-amino-2-(hydroxymethyl)-,hydrochloride 1-2% 214-684-5

#### Section 4: First Aid Measures

General information:

Immediately remove any contaminated clothing.

If inhaled:

Remove to fresh air and seek medical advice.

In case of skin contact:

Immediately wash exposed skin with soap and copious amounts of water.

• In case of eye contact:

Flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek medical advice.

• If ingested:

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention if not feeling well.

Most important symptoms/effects, acute and delayed:

No information available.

Indication of immediate medical attention and special treatment needed:

No information available.

# Section 5: Fire Fighting Measures

Suitable extinguishing media:

N/A

• Special hazards arising from substance or mixture:

N/A

## Advice for firefighters:

N/A

## Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures:

Evacuate and ventilate area.

Only trained personnel should handle spill cleanup.

Wash spill site after cleanup is complete.

## • Environmental precautions:

Prevent entry into sewers and public water. Notify appropriate authorities if entry occurs.

#### • Methods and materials for containment and cleaning up:

Contain any spills to prevent entry into water systems.

Place cleanup materials into suitable container for disposal in accordance with regulations.

#### Section 7: Handling and Storage

#### Precautions for safe handling:

Use appropriate protective equipment.

Wash hands and other exposed areas after handling before eating, drinking or smoking, and when leaving work.

## • Conditions for safe storage, including any incompatibilities:

Store in a dry, cool, well ventilated place.

Avoid elevated temperatures.

## Requirements to be met by storerooms and receptacles:

Keep container tightly closed.

Store at 2-8 °C

# • Information about storage in one common storage facility:

No information available.

# • Further information about storage conditions:

No information available.

#### Section 8: Exposure Controls/Personal Protection

#### Control Parameters

# Components with limit values that require monitoring at the workplace:

No information available.

# Components with biological limit values:

No information available.

#### Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas.

# • Individual protection measures:

# **General protective and hygienic measures:**

Keep away from food, beverages, and feed.

Immediately remove any contaminated clothing.

## **Breathing equipment:**

Where excessive vapor, mist, or dust may result, use NIOSH approved respiratory protection.

#### **Eye Protection:**

Wear safety glasses.

Eyewash station.

#### Skin and body Protection:

Wear protective gloves.

Lab coat.

## Section 9: Physical and Chemical Properties

• Physical state: Liquid

Color: Pale amber to colorless

Odor: None

Odor threshold: No information available.

pH: Neutral

• Melting point/range: No information available.

• Boiling point/range: 100 °C

• Flash point: No information available.

Evaporation rate: No information available.

• Flammability (solid, gaseous): No information available.

 Upper/ Lower explosive limits: Lower: No information available.

Upper: No information available.

• Vapor pressure (at 20 °C): No information available.

• Vapor density: No information available.

Relative density: No information available.

• Solubility(ies):

Water: Fully miscible.

Partition coefficient(n-octanol/water): No information available.

• Autoignition temperature: No information available.

• **Decomposition temperature:** No information available.

#### Section 10: Stability and Reactivity

Chemical Stability:

Stable under recommended storage and handling.

Possibility of hazardous reactions:

None known.

Conditions to avoid:

None known.

• Incompatible materials:

None known.

Hazardous decomposition products:

Thermal decomposition generates: CO<sub>2</sub>, CO, Nitrogen oxides.

#### Section 11: Toxicological Information

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated. The following refers to the hazardous ingredient(s) of the product. Other harmful effects cannot be excluded.

Acute toxicity

LD/LC 50 values:

No information available.

• Chronic Toxicity

Irritation:

May cause skin, eye, and respiratory irritation

Sensitization:

No information available.

Carcinogenicity:

No information available.

Mutagenic effects:

No information available.

Reproductive effects:

No information available.

**Developmental effects:** 

No information available.

Teratogenicity:

No information available.

# Section 12: Ecological Information

Aquatic toxicity:

No information available.

Terrestrial toxicity:

No information available.

• Persistence and degradability:

No information available.

• Bioaccumulative potential:

No information available.

• Mobility in soil:

No information available.

• Other adverse effects:

No information available.

# Section 13: <u>Disposal Considerations</u>

Dispose of material in accordance with federal, state, and local regulations. Do not allow product to be released into the environment.

## Section 14: Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA: Void

UN proper shipping name DOT, ADR, ADN, IMDG, IATA:
Void

Transport hazard class DOT, ADR, ADN, IMDG, IATA:

Void

Packing group DOT, ADR, ADN, IMDG, IATA: Void

**Environmental hazards Marine Pollutant:** 

No

Special precautions for user:

N/A

Section 15: Regulatory Information

N/A

## Section 16: Other Information

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This document is believed to be accurate, but does not purport to be all-inclusive and should be used only as a guide. Attogene Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should be not be confused with state, municipal, or insurance requirements, and constitutes NO WARRANTY.



## **MATERIAL SAFETY DATA SHEET**

# Rabbit anti-microcystin antibody solution

# Section 1: Chemical and Company Identification

Product Name: Rabbit anti-microcystin antibody solution

Recommended use: Laboratory Chemicals

**Company Identification:** Attogene Corporation 3913

Todd Lane Suite 310 Austin,

Texas 78744

**Emergency Number:** 512-333-1330

**Revision Date: N/A** 

Section 2: Hazards Identification

**GHS Classification** 

Not Classified

# **Precautionary statements:**

N/A

## Other Classification Systems:

NFPA ratings (scale 0-4):

Health= 0

Fire= 0

Reactivity= 0

HMIS ratings (scale 0-4)

Health= 0

Fire= 0

Reactivity= 0

Other hazards:

PBT: N/A vPvB: N/A

## Section 3: Composition/information on ingredients

Chemical characterization: Mixture

Contains no hazardous ingredients at levels requiring disclosure.

#### Section 4: First Aid Measures

General information:

Immediately remove any contaminated clothing.

If inhaled:

Remove to fresh air and seek medical advice.

In case of skin contact:

Immediately wash skin with soap and copious amounts of water.

• In case of eye contact:

Flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek medical advice.

• If ingested:

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention if not feeling well.

Most important symptoms/effects, acute and delayed:

No information available.

• Indication of immediate medical attention and special treatment needed:

No information available.

#### Section 5: Fire Fighting Measures

• Suitable extinguishing media:

N/A

• Special hazards arising from substance or mixture:

N/A

Advice for firefighters

N/A

## Section 6: Accidental Release Measures

• Personal precautions, protective equipment and emergency procedures:

Only trained personnel should handle spill cleanup.

Wash spill site after cleanup is complete.

• Environmental precautions:

Prevent entry into sewers and public water. Notify appropriate authorities if entry occurs.

Methods and materials for containment and cleaning up:

Contain any spills to prevent entry into water systems.

Place cleanup materials into suitable container for disposal in accordance with regulations.

## Section 7: Handling and Storage

Precautions for safe handling:

Use appropriate protective equipment.

Wash hands and other exposed areas after handling before eating, drinking or smoking, and when leaving work.

Conditions for safe storage, including any incompatibilities:

Keep the container tightly closed.

• Requirements to be met by storerooms and receptacles:

No further information available.

• Information about storage in one common storage facility:

No information available.

Further information about storage conditions:

No information available.

## Section 8: Exposure Controls/Personal Protection

Control Parameters:

Components with limit values that require monitoring at the workplace:

No information available.

Components with biological limit values:

No information available

Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas.

• Individual protection measures:

**General protective and hygienic measures:** 

Immediately remove any contaminated clothing.

**Breathing equipment:** 

If excessive vapor or mist may result, use NIOSH approved respiratory protection.

**Eve Protection:** 

Safety glasses, eye wash station.

Skin and body Protection:

Wear protective gloves.

Wear suitable protective clothing (i.e. lab coat).

#### Section 9: Physical and Chemical Properties

• Physical state: Liquid

Color: No information available.

Odor: No information available.

Odor threshold: No information available.

• pH: No information available.

Melting point/range: No information available.

• Boiling point/range: No information available.

• Flash point: No information available.

Evaporation rate: No information available.

• Flammability (solid, gaseous): Not flammable

Upper/ Lower explosive limits:

Lower: No information available.

Upper: No information available.

- Vapor pressure (at 20 °C): No information available.
- Vapor density: No information available.
- Relative density: No information available.
- Solubility(ies):

Water: fully miscible

- Partition coefficient(n-octanol/water): No information available.
- Autoignition temperature: No information available.
- **Decomposition temperature:** No information available.

# Section 10: Stability and Reactivity

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

No hazardous reactions known.

Conditions to avoid:

No information available.

• Incompatible materials:

No information available.

Hazardous decomposition products:

No information available.

# Section 11: Toxicological Information

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated. The following refers to the hazardous ingredient(s) of the product. Other harmful effects cannot be excluded.

- Acute toxicity:
- No information available.
- Chronic Toxicity

Irritation:

No information available.

Sensitization:

No information available.

Carcinogenicity:

No information available.

Mutagenic effects:

No information available.

Reproductive effects:

No information available.

**Developmental effects:** 

No information available.

Teratogenicity:

No information available.

#### Section 12: Ecological Information

Aquatic toxicity:

No information available.

• Terrestrial toxicity:

No information available.

Persistence and degradability:

No information available.

• Bioaccumulative potential:

No information available.

Mobility in soil:

No information available.

- Other adverse effects:
- No information available.

## Section 13: Disposal Considerations

Dispose in accordance with all federal, state and local environmental regulations.

#### Section 14: Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA: Void

UN proper shipping name DOT, ADR, ADN, IMDG, IATA:

Void

Transport hazard class DOT, ADR, ADN, IMDG, IATA:

Void

Packing group DOT, ADR, ADN, IMDG, IATA: Void

**Environmental hazards Marine Pollutant:** No

Special precautions for user:

N/A

Section 15: Regulatory Information

N/A

Section 16: Other Information

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This document is believed to be accurate, but does not purport to be all-inclusive and should be used only as a guide. Attogene Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should be not be confused with state, municipal, or insurance requirements, and constitutes NO WARRANTY.



## **MATERIAL SAFETY DATA SHEET**

## **Substrate**

Section 1: Chemical and Company Identification

**Product Name: Substrate** 

**Recommended use:** Laboratory Chemicals

**Company Identification:** Attogene Corporation 3913

Todd Lane Suite 310 Austin,

Texas 78744

**Emergency Number:** 512-333-1330

**Revision Date: N/A** 

Section 2: Hazards Identification

**GHS Classification** 

Not Classified

**Precautionary statements:** 

N/A

Other Classification Systems:

NFPA ratings (scale 0-4): Health= 0

-: -: -

Fire= 0

Reactivity= 0

HMIS ratings (scale 0-4)

Health= 0

Fire= 0

Reactivity= 0

Other hazards:

PBT: N/A vPvB: N/A

## Section 3: Composition/information on ingredients

Chemical characterization: Mixture

Contains no hazardous ingredients at levels requiring disclosure by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### Section 4: First Aid Measures

#### General information:

Immediately remove any contaminated clothing.

#### If inhaled:

Remove to fresh air and seek medical advice.

#### In case of skin contact:

Immediately wash skin with soap and copious amounts of water.

#### • In case of eye contact:

Flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek medical advice.

#### • If ingested:

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention if not feeling well.

## Most important symptoms/effects, acute and delayed:

No information available.

# • Indication of immediate medical attention and special treatment needed:

No information available.

#### Section 5: Fire Fighting Measures

#### Suitable extinguishing media:

N/A

## • Special hazards arising from substance or mixture:

N/A

#### • Advice for firefighters

N/A

## Section 6: Accidental Release Measures

## • Personal precautions, protective equipment and emergency procedures:

Evacuate and ventilate area.

Only trained personnel should handle spill cleanup.

Wash spill site after cleanup is complete.

## • Environmental precautions:

Prevent entry into sewers and public water. Notify appropriate authorities if entry occurs.

#### Methods and materials for containment and cleaning up:

Contain any spills to prevent entry into water systems.

Place cleanup materials into suitable container for disposal in accordance with regulations.

## Section 7: Handling and Storage

#### Precautions for safe handling:

Use appropriate protective equipment.

Wash hands and other exposed areas after handling before eating, drinking or smoking, and when leaving work.

# Conditions for safe storage, including any incompatibilities:

Keep the container tightly closed.

Keep away from light.

Store at 2-8 °C.

#### • Requirements to be met by storerooms and receptacles:

No further information available.

#### Information about storage in one common storage facility:

No information available.

## • Further information about storage conditions:

No information available.

## Section 8: Exposure Controls/Personal Protection

#### Control Parameters

# Components with limit values that require monitoring at the workplace:

No information available.

## Components with biological limit values:

No information available

#### • Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas.

## • Individual protection measures:

## General protective and hygienic measures:

Immediately remove any contaminated clothing.

#### **Breathing equipment:**

If excessive vapor or mist may result, use NIOSH approved respiratory protection.

#### **Eve Protection:**

Safety glasses, eye wash station.

## Skin and body Protection:

Wear protective gloves.

Wear suitable protective clothing (i.e. lab coat).

## Section 9: Physical and Chemical Properties

• Physical state: Liquid

• Color: Colorless to pale yellow

Odor: No information available.

• Odor threshold: No information available.

pH: 3.3-3.8

• Melting point/range: No information available.

• Boiling point/range: No information available.

Flash point: No information available.

Evaporation rate: No information available.

• Flammability (solid, gaseous): Not flammable

Upper/ Lower explosive limits:

Lower: No information available.

Upper: No information available.

- Vapor pressure (at 20 °C): No information available.
- Vapor density: No information available.
- Relative density: 1.01 (water = 1)
- Solubility(ies):

Water: fully miscible

- Partition coefficient(n-octanol/water): No information available.
- Autoignition temperature: No information available.
- **Decomposition temperature:** No information available.

# Section 10: Stability and Reactivity

#### Chemical Stability:

Stable under recommended handling and storage conditions.

# • Possibility of hazardous reactions:

No hazardous reactions known.

#### Conditions to avoid:

Light

Elevated temperature

Moisture

Incompatible materials:

Strong oxidizing agents Metals

# • Hazardous decomposition products:

Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides.

## Section 11: Toxicological Information

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated. The following refers to the hazardous ingredient(s) of the product. Other harmful effects cannot be excluded.

#### Acute toxicity

Not classified

#### • Chronic Toxicity

#### Irritation:

May cause respiratory, skin, and eye irritation.

#### Sensitization:

No information available.

## Carcinogenicity:

Not classified

# Mutagenic effects:

Not classified

# Reproductive effects:

Not classified

#### **Developmental effects:**

No information available.

#### Teratogenicity:

No information available.

# Section 12: Ecological Information

• Aquatic toxicity:

No information available.

# • Terrestrial toxicity:

No information available.

## • Persistence and degradability:

No information available.

## • Bioaccumulative potential:

No information available.

#### • Mobility in soil:

No information available.

#### Other adverse effects:

No information available.

# Section 13: Disposal Considerations

Dispose in accordance with all federal, state and local environmental regulations.

#### Section 14: Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA: Void

UN proper shipping name DOT, ADR, ADN, IMDG, IATA:

Void

Transport hazard class DOT, ADR, ADN, IMDG, IATA: Void

Packing group DOT, ADR, ADN, IMDG, IATA: Void

Environmental hazards
Marine Pollutant: No

Special precautions for user:

N/A

Section 15: Regulatory Information

N/A

Section 16: Other Information

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This document is believed to be accurate, but does not purport to be all-inclusive and should be used only as a guide. Attogene Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should be not be confused with state, municipal, or insurance requirements, and constitutes NO WARRANTY.



## **MATERIAL SAFETY DATA SHEET**

# **Stop Solution**

Section 1: Chemical and Company Identification

**Product Name: Stop Solution** 

MSDS Name: Hydrochloric Acid, 3.12%

Recommended use: Laboratory Chemicals

**Company Identification:** Attogene Corporation 3913

Todd Lane Suite 310 Austin,

Texas 78744

**Emergency Number:** 512-333-1330

**Revision Date: N/A** 

Section 2: Hazards Identification

**GHS Classification** 

Signal Word: Danger



Serious eye damage/eye irritation 1 H318 Causes serious eye damage.

Corrosive to metals 1 H290 May be corrosive to metals.





Acute Toxicity 4 H302 Harmful if swallowed.

Skin corrosion/irritation 2 H315 Causes skin irritation.

#### **Precautionary statements:**

## Prevention:

P260- Do not breathe dust/fumes/gas/mist/vapor/spray.

P264- Wash skin thoroughly after handling.

P270- Do not eat drink, or smoke when using this product.

P280- Wear protective gloves/eye/face protection.

P234- Keep only in original container.

#### Response:

#### General

P308+P314- IF exposed or concerned: Get medical advice/attention if you feel unwell.

#### Skin

P302+P352+P362+P364+P332+P313- IF ON SKIN: Wash with plenty of soap and water.

Take off contaminated clothing and wash before reuse.

If skin irritation occurs: Get medical advice/attention.

#### Eyes

P305+P351+P338+P310- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

#### Ingestion

P301+P312+P330- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

## Storage

P406- Store in corrosive resistant polypropylene container with a resistant inner liner.

#### Disposal

P501- Dispose of contents/container to an approved waste disposal plant.

#### **Other Classification Systems:**

```
NFPA ratings (scale 0-4):

Health= 2

Fire= 0

Reactivity= 0

HMIS ratings (scale 0-4)

Health= 2

Fire= 0

Reactivity= 0
```

#### Other hazards:

PBT: N/A vPvB: N/A

## Section 3: Composition/information on ingredients

Chemical characterization: Mixtures

CAS#	Chemical Name	<u>%</u>	<u>EC#</u>
7647-01-0	Hydrogen chloride	2 – 4%	231-595-7
111-46-6	Diethylene glycol	2 – 4%	203-872-2

#### Section 4: First Aid Measures

General information:

Immediately remove any clothing soiled by the product.

• If inhaled:

Supply fresh air and seek medical attention.

• In case of skin contact:

Immediately wash skin with soap and copious amounts of water.

• In case of eye contact:

Flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek medical advice.

• If ingested:

Give large amounts of water and induce vomiting if the person is conscious. Seek medical attention.

Most important symptoms/effects, acute and delayed:

No Information available.

• Indication of immediate medical attention and special treatment needed:

No information available.

#### Section 5: Fire Fighting Measures

Suitable extinguishing media:

N/A

• Special hazards arising from substance or mixture:

N/A

- Advice for firefighters
- Protective equipment:

N/A

## Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

Methods and materials for containment and cleaning up:

Sweep up, place in a bag, and hold for waste disposal.

Assure adequate ventilation.

Wash spill site after cleanup is complete.

## Section 7: Handling and Storage

Precautions for safe handling:

Ensure good ventilation/exhaustion.

Prevent formation of aerosols.

- Conditions for safe storage, including any incompatibilities:
- Requirements to be met by storerooms and receptacles:

N/A

Information about storage in one common storage facility:

N/A

• Further information about storage conditions:

Keep receptacle tightly sealed.

## Section 8: Exposure Controls/Personal Protection

#### Control Parameters

# Components with limit values that require monitoring at the workplace: 7647-01-0 Hydrogen chloride

PEL Short-term value: C 7 mg/m<sup>3</sup>, C 5 ppm

REL Short-term value: C 7 mg/m<sup>3</sup>, C 5 ppm

TLV Short-term value: C 2.98 mg/m<sup>3</sup>, C 2 ppm

# 111-46-6 Diethylene glycol

TWA: 10.00 mg/m<sup>3</sup>

#### Components with biological limit values:

N/A

#### Appropriate engineering controls:

Ensure adequate ventilation.

Ensure eyewash stations are close to the workstation.

• Individual protection measures:

# General protective and hygienic measures:

Keep away from food, beverages, and feed.

Immediately remove any soiled and contaminated clothing.

Avoid contact with eyes and skin.

#### **Breathing equipment:**

Good general ventilation should be sufficient to control airborne levels.

# **Eye Protection:**

Safety glasses, eye wash station.

## Skin and body Protection:

Protective gloves, lab coat.

## Section 9: Physical and Chemical Properties

• Physical state: Liquid

Color: ColorlessOdor: No odor

• Odor threshold: No information available.

pH: No information available.

• **Melting point/range:** No information available.

• Boiling point/range: 100 °C/ 212 °F

• Flash point: N/A

Evaporation rate: No information available.

Flammability (solid, gaseous): N/A

Upper/ Lower explosive limits:

Lower: No information available.

Upper: No information available.

- Vapor pressure (at 20 °C): 23 hPa
- Vapor density: No information available.
- Relative density: No information available.
- Solubility(ies): Water: fully miscible
- Partition coefficient(n-octanol/water): No information available.
- Autoignition temperature: Product is not self igniting.
- **Decomposition temperature:** No information available.

## Section 10: Stability and Reactivity

• Chemical Stability:

Stable under normal conditions.

• Possibility of hazardous reactions:

No dangerous reactions known.

• Conditions to avoid:

No information available.

• Incompatible materials:

No information available.

Hazardous decomposition products:

No dangerous decomposition products known.

#### Section 11: Toxicological Information

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated. The following refers to the hazardous ingredient(s) of the product. Other harmful effects cannot be excluded.

Acute toxicity

LD/LC 50 values:

7647-01-0 Hydrogen chloride

Oral LD50: 900 mg/kg (rabbit) 111-46-6 Diethylene glycol Oral LD50: 12,565 mg/kg (rat) Oral LD50: 1,000 mg/kg (human)

Dermal LD50: 1,000 mg/kg (human)
Dermal LD50: 11,890 mg/kg (rabbit)

Chronic Toxicity

Irritation:

Irritating to the skin, eyes, and mucous membranes.

Sensitization:

No sensitizing effects known.

Carcinogenicity:

No information available.

Mutagenic effects:

No information available.

Reproductive effects:

No information available.

**Developmental effects:** 

No information available.

Teratogenicity:

No information available.

## Section 12: Ecological Information

#### Aquatic toxicity:

Water hazard class 1: slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach sewage system or ground water.

• Terrestrial toxicity:

No information available.

• Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

• Mobility in soil:

No information available.

• Other adverse effects:

No information available.

## Section 13: Disposal Considerations

Dispose in accordance with all federal, state and local environmental regulations.

# Section 14: Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA: Void

UN proper shipping name DOT, ADR, ADN, IMDG, IATA:
Void

Transport hazard class DOT, ADR, ADN, IMDG, IATA: Void

Packing group DOT, ADR, ADN, IMDG, IATA: Void

**Environmental hazards Marine Pollutant:** No

Special precautions for user:

N/A

Section 15: Regulatory Information

N/A

# Section 16: Other Information

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This document is believed to be accurate, but does not purport to be all-inclusive and should be used only as a guide. Attogene Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should be not be confused with state, municipal, or insurance requirements, and constitutes NO WARRANTY.



## **MATERIAL SAFETY DATA SHEET**

## 100X Wash Solution

Section 1: Chemical and Company Identification

Product Name: 100X Wash Solution

**Recommended use:** Laboratory Chemicals

**Company Identification:** Attogene Corporation 3913

Todd Lane Suite 310 Austin,

Texas 78744

**Emergency Number:** 512-333-1330

**Revision Date: N/A** 

Section 2: Hazards Identification

**GHS Classification** 

Not Classified

**Precautionary statements:** 

N/A

**Other Classification Systems:** 

NFPA ratings (scale 0-4): Health= 0

Fire= 0

Reactivity= 0

HMIS ratings (scale 0-4)

Health= 0

Fire= 0

Reactivity= 0

Other hazards:

PBT: N/A vPvB: N/A

## Section 3: Composition/information on ingredients

Chemical characterization: Mixture

Contains no hazardous ingredients at levels requiring disclosure.

#### Section 4: First Aid Measures

General information:

Immediately remove any contaminated clothing.

If inhaled:

Remove to fresh air and seek medical advice.

In case of skin contact:

Immediately wash skin with soap and copious amounts of water.

• In case of eye contact:

Flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Seek medical advice.

• If ingested:

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Seek medical attention if not feeling well.

Most important symptoms/effects, acute and delayed:

No information available.

• Indication of immediate medical attention and special treatment needed:

No information available.

#### Section 5: Fire Fighting Measures

• Suitable extinguishing media:

N/A

• Special hazards arising from substance or mixture:

N/A

Advice for firefighters

N/A

## Section 6: Accidental Release Measures

• Personal precautions, protective equipment and emergency procedures:

Only trained personnel should handle spill cleanup.

Wash spill site after cleanup is complete.

Environmental precautions:

Prevent entry into sewers and public water. Notify appropriate authorities if entry occurs.

Methods and materials for containment and cleaning up:

Contain any spills to prevent entry into water systems.

Place cleanup materials into suitable container for disposal in accordance with regulations.

## Section 7: Handling and Storage

Precautions for safe handling:

Use appropriate protective equipment.

Wash hands and other exposed areas after handling before eating, drinking or smoking, and when leaving work.

Conditions for safe storage, including any incompatibilities:

Keep the container tightly closed.

Requirements to be met by storerooms and receptacles:

No further information available.

• Information about storage in one common storage facility:

No information available.

Further information about storage conditions:

No information available.

## Section 8: Exposure Controls/Personal Protection

Control Parameters:

Components with limit values that require monitoring at the workplace:

No information available.

Components with biological limit values:

No information available

Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas.

• Individual protection measures:

General protective and hygienic measures:

Immediately remove any contaminated clothing.

**Breathing equipment:** 

If excessive vapor or mist may result, use NIOSH approved respiratory protection.

**Eve Protection:** 

Safety glasses, eye wash station.

Skin and body Protection:

Wear protective gloves.

Wear suitable protective clothing (i.e. lab coat).

#### Section 9: Physical and Chemical Properties

• Physical state: Liquid

Color: No information available.

- Odor: No information available.
- Odor threshold: No information available.
- pH: No information available.
- Melting point/range: No information available.
- Boiling point/range: No information available.
- Flash point: No information available.
- Evaporation rate: No information available.
- Flammability (solid, gaseous): Not flammable
- Upper/ Lower explosive limits:

Lower: No information available.

Upper: No information available.

- Vapor pressure (at 20 °C): No information available.
- Vapor density: No information available.
- Relative density: No information available.
- Solubility(ies):

Water: fully miscible

- Partition coefficient(n-octanol/water): No information available.
- Autoignition temperature: No information available.
- **Decomposition temperature:** No information available.

# Section 10: Stability and Reactivity

Chemical Stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

No hazardous reactions known.

Conditions to avoid:

No information available.

Incompatible materials:

Strong oxidizing agents

• Hazardous decomposition products:

No information available.

# Section 11: Toxicological Information

To the best of our knowledge, the chemical, physical, and toxicological properties of this product have not been thoroughly investigated. The following refers to the hazardous ingredient(s) of the product. Other harmful effects cannot be excluded.

## Acute toxicity:

Not classified

## • Chronic Toxicity

Irritation:

May cause mild skin irritation.

Sensitization:

No information available.

Carcinogenicity:

Not classified

Mutagenic effects:

Not classified

Reproductive effects:

Not classified

**Developmental effects:** 

No information available.

Teratogenicity:

No information available.

#### Section 12: Ecological Information

• Aquatic toxicity:

No information available.

• Terrestrial toxicity:

No information available.

Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

Mobility in soil:

No information available.

- Other adverse effects:
- No information available.

## Section 13: Disposal Considerations

Dispose in accordance with all federal, state and local environmental regulations.

## Section 14: Transport Information

**UN-Number** 

DOT, ADR, ADN, IMDG, IATA:

Void

UN proper shipping name DOT, ADR, ADN, IMDG, IATA:

Void

Transport hazard class DOT, ADR, ADN, IMDG, IATA: Void

Packing group DOT, ADR, ADN, IMDG, IATA: Void

**Environmental hazards Marine Pollutant:** No

Special precautions for user:

N/A

Section 15: Regulatory Information

N/A

Section 16: Other Information

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This document is believed to be accurate, but does not purport to be all-inclusive and should be used only as a guide. Attogene Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should be not be confused with state, municipal, or insurance requirements, and constitutes NO WARRANTY.