Material Safety Data Sheet

Date prepared: May 28, 2012 Date revised: N/A (first edition)

Section 1 - General Information

Chemical Name: Benzoic acid CAS Reg. Number: 65-85-0 Catalog Number: 1ST2703

Manufacturer's Name: Alta Scientific Co., Ltd.

Tianjin International Joint Academy of Biotechnology & Medicine, N1803

220 Dongting Road, TEDA, Tianjin 300457, P.R.China

 Telephone Number:
 86-22-65378550

 Fax Number:
 86-22-25329655

For R & D use only

Section 2 - Hazardous Ingredients/Identity Information

Emergency Overview

OSHA Hazards: Harmful by ingestion, Irritant, Harmful by inhalation.

Irritant

GHS Classification

Acute toxicity, Oral (Category 5) Serious eye damage (Category 1)

Specific target organ toxicity - single exposure (Category 3)

GHS Label elements, including precautionary statements

Pictogram
Signal word
Danger

Hazard statement(s)

H303 May be harmful if swallowed. H318 Causes serious eye damage. H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health hazard:2Flammability:1Physical hazards:0

NFPA Rating

Health hazard: 2 Fire: 1 Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed..

Section 3 - Composition/Information on Ingredients

Section 4 - First Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

Material Safety Data Sheet

Date prepared: May 28, 2012 Date revised: N/A (first edition)

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5 - Fire-Fighting Measures

Flammable properties

Flash point 121 °C (250 °F) - closed cup

Ignition temperature not available

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Section 6 - Accidental Release Measures

Personal precautions Avoid dust formation.

Environmental precautions Do not let product enter drains.

Methods for cleaning up Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for

preventive fire protection.

Storage Keep container tightly closed in a dry and well-ventilated place.

Section 8 - Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection For prolonged or repeated contact use protective gloves

Eye protection Safety glasses

Hygiene measures General industrial hygiene practice

Section 9 - Physical and Chemical Properties

Appearance:

Form Crystalline Color White

Safety data

pH: 2.5 - 3.5 at 20 °C (68 °F) Melting point: 121 - 125 °C (250 - 257 °F) - lit.

Boiling point: $249 \,^{\circ}\text{C} (480 \,^{\circ}\text{F}) - \text{lit}$ Flash point: $121 \,^{\circ}\text{C} (250 \,^{\circ}\text{F}) - \text{closed cup}$

Ignition temperature: 572 °C (1,062 °F)
Lower explosion limit: not available
Upper explosion limit: not available

Water solubility: 2.9 g/l at 25 °C (77 °F)

Section 10 - Stability and Reactivity

Storage stability Stable under recommended storage conditions

Materials to avoidStrong oxidizing agents, Strong bases, Strong reducing agentsHazardous decomposition productsHazardous decomposition products formed under fire conditions.

- Carbon oxides

Section 11 - Toxicological Information

Material Safety Data Sheet

Date prepared: May 28, 2012 Date revised: N/A (first edition)

Acute toxicity: Oral LD50

LD50 Oral - rat - > 2,000 mg/kg

Inhalation LC50

LC50 Inhalation - rat - 4 h - > 12.2 mg/l

Dermal LD50

LD50 Dermal - rabbit - > 10,000 mg/kg

Skin corrosion/irritation

Skin - rabbit - Mild skin irritation - 24 h - Draize Test

Serious eye damage/eye irritation

Eyes - rabbit - Risk of serious damage to eyes. - Draize Test
Irritation and corrosion:

Sensitization:

Respiratory or skin sensitization:

not available
not available

Chronic exposure

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation. Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

Additional Information RTECS: DG0875000

Section 12 - Ecological Information

Toxicity

Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 180 mg/l - 96 h

Toxicity to algae Growth inhibition EC50 - Scenedesmus quadricauda (Green algae) - > 10 mg/l - 14 d

Elimination information (persistence and degradability) not available

Ecotoxicity effects: not available **Further information on ecology:** not available

Section 13 - Disposal Considerations

Product Observe all federal, state, and local environmental regulations.

Contaminated packaging Dispose of as unused product.

Section 14- Transport Information

DOT (US): UN 3077, Class 9, PG III

Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Benzoic acid)

Reportable Quantity (RQ): 5000 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG: Not dangerous goods IATA: Not dangerous goods

Section 15 - Regulatory Information

OSHA Hazards: Harmful by ingestion., Irritant, Harmful by inhalation.Irritant

SARA 302 Components: SARA 302: No chemicals in this material are subject to the reporting requirements of

SARA Title III, Section 302.

SARA 313 Components: SARA 313: This material does not contain any chemical components with known

CAS numbers that exceed the threshold (De Minimis) reporting levels established by

SARA Title III, Section 313.

SARA 311/312 Hazards: Acute Health Hazard

Massachusetts Right To Know Components

Benzoic acid CAS no. 65-85-0

Material Safety Data Sheet

Date prepared: May 28, 2012 Date revised: N/A (first edition)

Pennsylvania Right To Know Components

Benzoic acid CAS no. 65-85-0

New Jersey Right To Know Components

Benzoic acid CAS no. 65-85-0

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

Section 16 - Other Information

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Alta Scientific shall not be held liable for any damage resulting from handling or from contact with the above product.

.