MATERIAL SAFETY DATA SHEET

LY 294002, 4'-NH2: sc-203121



The Power to Question

1. Product and company identification

Product number : LY 294002, 4'-NH2

Product code : sc-203121

Supplier : Santa Cruz Biotechnology, Inc.

2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800

Material uses : Other non-specified industry: Inhibitors

2. Hazards identification

Handle with care and dispose in a safe manner.

No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin

and clothing.

Physical state : Solid.

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and

available for employees and other users of this product.

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure. May be irritating to eyes, skin and respiratory system.

Ingestion : No known significant effects or critical hazards.

Skin : May cause skin irritation.

Eyes : May cause eye irritation.

Potential chronic health effects

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Medical conditions aggravated by over-

exposure

: None known.

See toxicological information (section 11)

3. Composition/information on ingredients

Code Name CAS number % by weight

440206 2-(4-Morpholinyl)-8-(4-aminophenyl)-4H-1-benzopyrone-4-one 942289-87-4 100

4. First aid measures

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact

Inhalation

: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean

shoes thoroughly before reuse. Get medical attention if symptoms occur.

: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if

symptoms occur.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical

personnel. Never give anything by mouth to an unconscious person. Get medical

attention if symptoms occur.

5 . Fire-fighting measures

Flammability of the product

: No specific fire or explosion hazard.

Extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Not suitable

: None known.

Special exposure hazards

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing

apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Accidental release measures 6.

Personal precautions

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Handling and storage

Storage

: Store in accordance with local regulations. Store in original container, protected from direct sunlight. Keep container tightly closed and sealed until ready for use.

Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Engineering measures

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

8. **Exposure controls/personal protection**

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Physical and chemical properties 9.

: 440206 Component name Solid. **Physical state** : Off-white. Color : Not available. Odor Molecular weight : 322.4 g/mole Molecular formula : C₁₉H₁₈N₂O₃ pН : Not available. **Boiling/condensation point** : Not available. : Not available. **Melting/freezing point** Relative density : Not available. Vapor pressure : Not available. : Not available. Vapor density : Not available. **Odor threshold Evaporation rate** Not available. Soluble in DMSO Physical/chemical properties comments

10. Stability and reactivity

Chemical stability

: The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous polymerization

: Under normal conditions of storage and use, hazardous polymerization will not occur.

: No specific data. Conditions to avoid Materials to avoid

: No specific data.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

12. Ecological information

Environmental effects: No known significant effects or critical hazards.

13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. Transport information

As the material is not regulated, no transport information will be given.

15. Regulatory information

United States

HCS Classification

: Not regulated.

U.S. Federal regulations

: TSCA 8(b) inventory: This product is being sent to you as a Research and Development product as defined by the Toxic Substances Act (TSCA) of 1976. Due to TSCA's R&D exemption, this product is not listed on the U.S. EPA's Toxic Substances Control Act (TSCA's) inventory. As a TSCA exempt R&D substance, this product must be used by or directly under the supervision of a technically qualified individual(s) as defined by TSCA. This product may not be used for commercial purposes or in formulations used for commercial purposes.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

DEA List I Chemicals (Precursor Chemicals)

: Not listed

DEA List II Chemicals (Essential Chemicals)

: Not listed

Canada

WHMIS (Canada)

: Not controlled under WHMIS (Canada).

Canadian lists

: CEPA Toxic substances: This material is not listed.

Canadian ARET: This material is not listed.

Canadian NPRI: This material is not listed.

Alberta Designated Substances: This material is not listed. Ontario Designated Substances: This material is not listed. Quebec Designated Substances: This material is not listed.

15. Regulatory information

CEPA DSL / CEPA NDSL : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

EU regulations

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : S22- Do not breathe dust.

S24/25- Avoid contact with skin and eyes.

S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

International regulations

International lists : Australia inventory (AICS): Not determined.

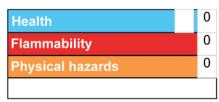
China inventory (IECSC): Not determined. Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

National Fire Protection Association (U.S.A.)



Notice to reader

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

Emergency Contact:

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800 or Luis Yanez 831.251.2170