1,2-Bis(3,5-di-tert-butyl-4-hydroxyhydrocinnamoyl) hydrazine: sc-356267

MATERIAL SAFETY DATA SHEET

1 Product and company identification

Product Name: 1,2-Bis(3,5-di-tert-butyl-4-hydroxyhydrocinnamoyl)hydrazine
Product Number: sc-356267

Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060
800.457.3801 or 831.457.3800

Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2 Composition/information on ingredients

Chemical characterization: Substances
Chemical Name: 1,2-Bis(3,5-di-tert-butyl-4-hydroxyhydrocinnamoly) hydrazine
CAS No.: 32687-78-8
EC number: 251-156-3

3 Hazards identification

Classification of the substance or mixture
The substance is not classified according to the Globally Harmonized System (GHS).
Label elements
GHS label elements: Void
Hazard pictograms: Void
Signal word: Void
Hazard statements: Void
Classification system:
NFPA ratings (scale 0 - 4)

Health	1
Fire	1
Reactivity	0

HMIS-ratings (scale 0 - 4)

Health	0
Fire	1
Reactivity	0

4 First aid measures

General information: Take affected persons out of danger area and lay down.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor.

5 Firefighting measures

Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.
Special hazards arising from the substance or mixture: Carbon monoxide (CO)
Protective equipment: Wear self-contained respiatory protective device.
Additional information: Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation Wear protective clothing. Avoid formation of dust. Keep away from ignition sources.
Environmental precautions: Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up: Pick up mechanically. Dispose of the collected material according to regulations.
Reference to other sections: No dangerous substances are released.

7 Handling and storage
Handling
Precautions for safe handling: Prevent formation of dust. Any deposit of dust which cannot be avoided must be regularly removed. Ensure good ventilation/exhaustion at the workplace.
Information about protection against explosions and fires: Dust can combine with air to form an explosive mixture. Keep ignition sources away. Do not smoke. Protect against electrostatic charges.
Storage
Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
Information about storage in one common storage facility: Store away from oxidizing agents.
Further information about storage conditions: Store in dry conditions at room temperature.

8 Exposure controls/personal protection
Components with limit values that require monitoring at the workplace: Not required.
Additional Occupational Exposure Limit Values for possible hazards during processing:
PEL: 15* 5** mg/m³
* total dust **respirable fraction
REL: 10* 5** mg/m³
* total dust **respirable fraction
TLV: 10 mg/m³
Dust Value
Personal protective equipment
General protective and hygienic measures: Do not eat, drink, smoke or sniff while working. Keep away from foodstuffs, beverages and feed. The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not necessary if room is well-ventilated.
Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves: Butyl rubber, BR; Nitrile rubber, NBR; PVC gloves
Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Safety glasses
Body protection: Protective work clothing

9 Physical and chemical properties
Form	Powder	Odor	Odorless
Molecular Formula	$C_{34}H_{52}N_2O_4$	Molecular Weight	552.79
Melting point/Melting range	221-232° C	Boiling point/Boiling range	Undetermined
Flash point	> 180° C	Flammability (solid, gaseous)	Not flammable
Danger of explosion	No explosion hazard	Density at 20° C (68° F)	1.11 g/cm3
Solubility in / Miscibility with Water at 20°C (68 °F)	< 0.001 g/l		

10 Stability and reactivity
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information
Acute toxicity
Oral LD50 > 7000 mg/kg (Rat)
Primary irritant effect
on the skin: No irritant effect.
on the eye: No irritating effect.
Sensitization: No sensitizing effects known.

12 Ecological information
Acquatic toxicity
EC50 (24h) > 15 mg/l (Daphnia)
LC50 (96h) > 100 mg/l (Fish)
Behavior in environmental systems
Bioaccumulative potential: No further relevant information available.
Ecotoxical effects: No effects at its water solubility. Tested above the maximum solubility.
Additional ecological information: Water hazard class 1 (Self-assessment): slightly hazardous for water

13 Disposal considerations
Waste treatment methods: Must be specially treated adhering to official regulations.
Uncleaned packagings: Disposal must be made according to official regulations.

14 Transport information

DOT regulations
Hazard class: Not classified
Land transport ADR/RID (cross-border)
ADR/RID class: Not classified
Maritime transport IMDG
IMDG Class: Not classified
Air transport ICAO-TI and IATA-DGR
ICAO/IATA Class: Not classified
UN "Model Regulation": -
Transport/Additional information: Not dangerous according to the above specifications.

15 Regulatory information

Sara
Section 355 (extremely hazardous substances): Substance is not listed.
Section 313 (Specific toxic chemical listings): Substance is not listed.
TSCA (Toxic Substances Control Act): Substance is listed.
Proposition 65
Chemicals known to cause cancer: Substance is not listed.
Chemicals known to cause reproductive toxicity for females: Substance is not listed.
Chemicals known to cause reproductive toxicity for males: Substance is not listed.
Chemicals known to cause developmental toxicity: Substance is not listed.
Cancerogenity categories
EPA (Environmental Protection Agency): Substance is not listed.
IARC (International Agency for Research on Cancer): Substance is not listed.
NTP (National Toxicology Program): Substance is not listed.
TLV (Threshold Limit Value established by ACGIH): Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health): Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration): Substance is not listed.
Chemical Inventories
Australia - AICS
Canada - DSL
EU - EINECS
China - IECSC
Japan - ENCS
New Zealand - NZIOC
Korea - ECL
USA - TSCA
Philippines - PICCS

16 Other information

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.

7/9/2012