

Geranylgeranylpyrophosphate triammonium salt: sc-200849



The Power to Question

MATERIAL SAFETY DATA SHEET

1 Identification of the substance/mixture and of the company/undertaking

Product Name: Geranylgeranylpyrophosphate triammonium salt
Catalog Number: sc-200849
Synonyms: 3,7,11,15-Tetramethyl-2,6–10,14-hexadecatetraenyl pyrophosphate NH₃
CAS Number: 313263–08–0
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 Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

STOT SE 3 H335+H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC:



T+; Toxic

R23/24/25–39: Toxic by inhalation, in contact with skin and if swallowed. Danger of very serious irreversible effects.



C; Corrosive

R34: Causes burns.



Xi; Irritant

R37: Irritating to respiratory system.



N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

R67: Vapors may cause drowsiness and dizziness.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements

Labeling according to EU guidelines: The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



T Toxic

N Dangerous for the environment

Hazard-determining components of labeling: ammonia

Risk phrases: 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

34 Causes burns.

37 Irritating to respiratory system.

39 Danger of very serious irreversible effects.

50 Very toxic to aquatic organisms.

67 Vapors may cause drowsiness and dizziness.

Safety phrases:

7 Keep container tightly closed.

16 Keep away from sources of ignition – No smoking.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

57 Use appropriate container to avoid environmental contamination.

Other hazards Contains isopropanol.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description:

Mixture of substances listed below with nonhazardous additions.

Geranylgeranylpyrophosphate . triethylammonium salt CAS Nr. 6699–20–3

· Dangerous components:		
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	propan-2-ol ☒ Xi R36; ☒ F R11 R67 ☒ Flam. Liq. 2, H225; ☒ Eye Irrit. 2, H319; STOT SE 3, H336	70,0%
CAS: 1336-21-6 EINECS: 215-647-6 Index number: 007-001-01-2	ammonia ☒ C R34; ☒ N R50 ☒ Skin Corr. 1B, H314; ☒ Aquatic Acute 1, H400	29,9%

Additional information: For the wording of the listed risk phrases refer to section 16.

The compound is dissolved in Isopropanol:ammonium hydroxide (7:3).

4 First aid measures

Description of first aid measures

General information: Immediately remove any clothing soiled by the product. Remove breathing equipment only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation: Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After ingestion: Do not induce vomiting; call for medical help immediately. Drink plenty of water and provide fresh air. Call for a doctor immediately.

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

No further relevant information available.

Advice for firefighters

Protective equipment:

Mouth respiratory protective device. Wear self-contained respiratory protective device. Do not inhale explosion gases or combustion gases. Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away. Wear protective clothing.

Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.

Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.

Information about fire – and explosion protection:

Keep ignition sources away – Do not smoke.

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store tightly sealed in a cool, dry and well ventilated location (see label for storage temperature and additional specific information).

Information about storage in one common storage facility:

Keep away from heat, sources of ignition and incompatibles such as oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed. Store under lock and key and with access restricted to technical experts or their assistants only.

Specific end use(s)

No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters**Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

Exposure controls**Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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:

Tightly sealed goggles

9 Physical and chemical properties**Information on basic physical and chemical properties****General Information**

Form	Fluid	Odor	Characteristic
Odor threshold	Not determined	pH-value	Not determined
Melting point/Melting range	Undetermined	Boiling point/Boiling range	Undetermined
Flash point	Not applicable	Evaporation rate	Not determined
Flammability	Not applicable	Kinematic Viscosity	Not determined
(solid, gaseous)			
Ignition temperature	Not determined	Decomposition temperature	Not determined
Self-igniting	Product is not self igniting.	Lower Explosion limits	Not determined
Upper Explosion limits	Not determined	Vapor pressure	Not determined
Density	Not determined	Relative density	Not determined

Vapor density	Not determined	Dynamic Viscosity	Not determined
Solvent content:			
Organic solvents	70.0 %		

Solubility in/Miscibility with water: Fully miscible

Segregation coefficient (n-octanol/water): Not determined

Danger of explosion: Product does not present an explosion hazard.

Other information: No further relevant information available.

10 Stability and reactivity

Reactivity

Chemical stability: Stable. Avoid strong oxidizing agents.

Thermal decomposition/conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

67–63–0 propan-2-ol

Oral LD50 5045 mg/kg (rat)

Dermal LD50 12800 mg/kg (rabbit)

Inhalative LC50/4 h 30 mg/l (rat)

Primary irritant effect:

on the skin: Caustic effect on skin and mucous membranes.

on the eye: Strong caustic effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Ecotoxicological effects:

Remark: Very toxic for fish

Additional ecological information:

General notes:

Generally not hazardous for water. Must not reach sewage water or drainage ditch undiluted or unneutralized.

Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number

ADR, IMDG, IATA UN2672

ADN Void

UN proper shipping name

ADR 2672 AMMONIA SOLUTION, ENVIRONMENTALLY HAZARDOUS

ADN Void

IMDG, IATA 2672 AMMONIA SOLUTION

Transport hazard class(es)

ADR



Class 8 Corrosive substances.

ADN/R Class: Void

IMDG, IATA

Class 8 Corrosive substances.

Packing group

ADR, IMDG, IATA III

Environmental hazards:

Marine pollutant: No

Special marking (ADR): Symbol (fish and tree)

Special precautions for user: Warning: Corrosive substances.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

UN "Model Regulation": U N 2 6 7 2 , A M M O N I A S O L U T I O N , ENVIRONMENTALLY HAZARDOUS, 8, III

15 Regulatory information

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

Relevant phrases

H225 Highly flammable liquid and vapor.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

R11 Highly flammable.

R34 Causes burns.

R36 Irritating to eyes.

R50 Very toxic to aquatic organisms.

R67 Vapors may cause drowsiness and dizziness.