

Chemical Material Safety Data Sheet

Chemical Name: Caspofungin acetate

Part 1 Chemical and Manufacturer Introduction

<u>Chemical Name (Chinese)</u>	醋酸卡泊芬净
<u>Trivial name</u>	N/A
<u>Chemical Name (English)</u>	Caspofungin;(3S,6S,9S,11R,15S,18S,20R,21S,24S,25S)-21-(2-Aminoethylamino)-3-[3-amino-1(R)-hydroxypropyl]-6-[1(S),2(S)-dihydroxy-2-(4-hydroxyphenyl)ethyl]-18-(10,12-dimethyltetradecanamido)-11,20,25-trihydroxy-15-[1(R)-hydroxyethyl]-1,4,7,13,16,22-hexaazatricyclo[22.3.0.0(9,13)]heptacosane-2,5,8,14,17,23-hexaone diacetate
<u>Company Identification</u>	BrightGene Bio-Medical Technology Co., Ltd. Tel:86-512-80980988

Part 2 Component information

<u>Item</u>	<u>Name</u>	<u>Content.</u>	<u>CAS No.</u>	<u>Molecular formula</u>	<u>Molecular Weight</u>
Major component	Caspofungin	≥98	179463-17-3	C ₅₂ H ₈₈ N ₁₀ O ₁₅ ·2(C ₂ H ₄ O ₂)	1213.42
Impurities	N/A	N/A	N/A	N/A	N/A

Part 3 Hazards Description

<u>Hazards class</u>	N/A
<u>Exposure pathway</u>	Skin contact, eye contact, inhalation, ingestion
<u>Health effect</u>	May have a stimulating effect on the eyes, skin, mucous membranes and upper respiratory tract
<u>Environment hazards</u>	Harmful to the environment, pollute water and soil
<u>Hazards from combustion and explosion</u>	N/A

Part 4 First Aid Measures

<u>Skin contact</u>	Wash with soap and water. Get medical attention if irritation develops.
<u>Eye contact</u>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
<u>Inhalation</u>	If inhaled, remove to fresh air. If not breathing, give CPR (cardiopulmonary resuscitation). If breathing is difficult, give oxygen. Get medical attention immediately.
<u>Ingestion</u>	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 appear.

Part 5 Firefighting

<u>Hazardous characteristics</u>	N/A
<u>Hazardous combustion product</u>	Carbon oxides, nitrogen oxides (NOx)
<u>Extinguish Method and media</u>	Water vapor, dry chemical, or carbon dioxide
<u>Note</u>	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Part 6 Leakage emergency disposal

<u>Leakage emergency disposal</u>	Immediately contact emergency personnel. Keep unnecessary personnel away. If emergency personnel are unavailable vacuum or carefully scoop up spilled materials and place in an appropriate container for disposal. Avoid creating dusty conditions and prevent wind dispersal. Minimize contact of spilled material with soils to prevent runoff to surface waterways.
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Part 7 Operation and Storage

<u>Note on operation</u>	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid contact of spilled material and runoff with soil and surface waterways.
<u>Notes on storage</u>	Store in a tight container at -70°C. Keep container in well-ventilated area.

Part 8 Labor Protection

<u>Maximum allowable concentration</u>	N/A
<u>Monitoring Method</u>	N/A
<u>Process control</u>	None required with normal handling of finished product. Minimize open handling. Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the powders to uncontrolled areas (e.g., open-face containment devices).
<u>Respiration protection</u>	If ventilation is not available a respirator should be worn
<u>Eye protection</u>	Wear safety goggles when handling a chemical substance in the laboratory.
<u>Body protection</u>	Wear appropriate protective clothing to minimize contact with skin.
<u>Hand protection</u>	Wear protective clothing and gloves.
<u>Others</u>	Work site prohibit smoking, eating and drinking. After work, take a shower. Maintain good health habits.

Part 9 Physical and Chemical Characteristics

<u>Appearance</u>	White to off white powder		
<u>pH</u>	N/A	<u>Critical Temp.(°C)</u>	N/A
<u>Melting Point (°C)</u>	153	<u>Critical Pressure(MPa)</u>	N/A
<u>Boiling Point (°C)</u>	1408.1	<u>Ignition Temp.(°C)</u>	N/A

<u>Flash point(°C)</u>	805	<u>density.(g/cm³)</u>	N/A
<u>Vapor density related to ai</u>	N/A	<u>Logarithm of dispensing coefficient in Octanol/Water</u>	N/A
<u>Saturated vapor pressure (kPa)</u>	N/A	<u>Upper explosive limit(V/V)</u>	N/A
<u>Combustion heat(kJ/mol)</u>	N/A	<u>Low explosive limit(V/V)</u>	N/A
<u>Solubility</u>	Easily soluble in cold water.		
<u>Main application</u>	Therapy for the treatment of other invasive or intolerant to mycosis		
<u>Others</u>	N/A		

Part 10 Stability and Reactivity

<u>Stability</u>	Stable under ordinary conditions
<u>Material to avoid</u>	N/A
<u>Condition to avoid</u>	Please keep it away from direct light, and wet
<u>Polymerization</u>	N/A
<u>Decomposition products</u>	N/A

Part 11 Toxicological Data

<u>Acute toxicity</u>	N/A
<u>Subacute and chronic toxicity</u>	N/A
<u>Irritation</u>	N/A
<u>Sensitization</u>	N/A
<u>Mutagenicity</u>	N/A
<u>Teratogenicity</u>	N/A
<u>Carcinogenicity</u>	N/A
<u>Others</u>	N/A

Part 12 Ecological information Data

<u>Ecological toxicological</u>	N/A
<u>Biodegradation</u>	N/A
<u>Abioticdegradation</u>	N/A
<u>Bio-concentration/Bio-accumulation</u>	N/A
<u>Others</u>	N/A

Part 13 Disposal considerations

<u>Waste description</u>	N/A
<u>Disposal method</u>	The predisposal should refer to the relevant state and local laws and

regulations. Proposed disposal by incineration

Notes N/A

Part 14 Transportation

Code General Goods

UN Code N/A

Package mark N/A

Kinds of package N/A

Packing method Aluminum bag

Caution during transportation N/A

Part 15 Regulatory reference

Regulatory reference Chemical Dangerous Goods Safety Management Regulations (December 1, 2011)
Implementation of the Regulations of the safety management of dangerous
chemicals (of labor [1992] No. 677)
Safe use of chemicals in the workplace regulations (Ministry of Labor [1996] No.
423) and other laws and regulations
Commonly used classification and marking of hazardous chemicals (GB
13690-92)

Part 16 Other information

Reference literature N/A

Effective date of previous version N/A

Update date 2016.03.28

Dept. fill in EHS

Data Review N/A

Revision information N/A

Others N/A

Note: MSDS information should be updated every five years.