

Creation Date 22-Jul-2010

Revision Date 15-Dec-2011

Revision Number 4

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Description:** A23187 (free acid)  
**Cat No.** 328080000; 328080010; 328080050  
**Synonyms** Antibiotic A23187; Calcimycin; Calcium Ionophore A23187

### Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300  
 CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ systemic toxicity (single exposure)	Category 3

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

**Symbol(s)** Xn - Harmful

**R-phrases(s)**

**Risk Combination Phrases** R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed  
 R36/37/38 - Irritating to eyes, respiratory system and skin

A23187 (free acid)

Revision Date 15-Dec-2011

**SECTION 2. HAZARDS IDENTIFICATION**

Label Elements



Signal Word

Warning

**Hazard Statements**

- H312 - Harmful in contact with skin
- H332 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H315 - Causes skin irritation
- H302 - Harmful if swallowed
- H319 - Causes serious eye irritation

**Precautionary Statements - EU (§28, 1272/2008)**

- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell
- P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
- P280 - Wear protective gloves/ protective clothing/ 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

**Other Hazards**

No information available.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	EC-No.	Weight %	CAS-No	67/548/EEC Classification	CLP Classification - Regulation (EC) No 1272/2008	REACH No.

**A23187 (free acid)**
**Revision Date 15-Dec-2011**
**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

4-Benzoxazolecarboxylic acid, 5-(methylamino)-2-[[3,9,11-trimethyl-8-[1-methyl-2-oxo-2-(1H-pyrrol-2-yl)ethyl]-1,7-dioxaspiro[5.5]undec-2-yl]methyl]-, [6S-6.alpha.(2S*,3S*),8.beta.(R*),9.beta.,11.alpha.52665-69-7	EEC No. 258-084-1	>95	52665-69-7	Xn; R20/21/22 Xi; R36/37/38	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)	-
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**For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16**
**SECTION 4. FIRST AID MEASURES**
**Description of first aid measures**
**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Ingestion**

Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Inhalation**

Move to fresh air. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device.

**Notes to Physician**

Treat symptomatically

**SECTION 5. FIRE-FIGHTING MEASURES**
**Extinguishing media**
**Suitable Extinguishing Media**

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

**Extinguishing media which must not be used for safety reasons**

No information available.

**Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating gases and vapors

**Advice for fire-fighters**

A23187 (free acid)

Revision Date 15-Dec-2011

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

### Environmental precautions

Should not be released into the environment.

### Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

### Conditions for safe storage, including any incompatibilities

Keep away from direct sunlight. Store in freezer. Keep container tightly closed in a dry and well-ventilated place.

### Specific End Uses

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### **Derived No Effect Level (DNEL)**

No information available.

#### **Predicted No Effect Concentration (PNEC)**

No information available.

### Exposure controls

#### **Engineering Measures**

Use only under a chemical fume hood Ensure that eyewash stations and safety showers are close to the workstation location

#### **Personal protective equipment**

##### **Eye Protection**

Goggles

##### **Hand Protection**

Protective gloves

A23187 (free acid)

Revision Date 15-Dec-2011

**Skin and body protection**  
**Respiratory Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure  
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

**Hygiene Measures**  
**Environmental exposure controls**

Handle in accordance with good industrial hygiene and safety practice  
No information available.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Solid
<b>Appearance</b>	Off-white
<b>odor</b>	odorless
<b>pH</b>	No information available.
<b>Boiling Point/Range</b>	No information available.
<b>Melting Point/Range</b>	182 - 193°C / 359.6 - 379.4°F
<b>Flash Point</b>	No information available.
<b>Autoignition Temperature</b>	No information available.
<b>Molecular Formula</b>	C29 H37 N3 O6
<b>Molecular Weight</b>	523.63

**SECTION 10. STABILITY AND REACTIVITY****Reactivity****Chemical Stability**

Light sensitive.

**Possibility of Hazardous Reactions**

**Hazardous Polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions .** None under normal processing..

**Conditions to Avoid**

Incompatible products, Excess heat, Avoid dust formation, Exposure to light.

**Incompatible Materials**

Strong oxidizing agents.

**Hazardous Decomposition Products**Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).**SECTION 11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects**

A23187 (free acid)

Revision Date 15-Dec-2011

**SECTION 11. TOXICOLOGICAL INFORMATION****Acute Toxicity****Product Information** No acute toxicity information is available for this product**Component Information****Chronic Toxicity****Carcinogenicity** There are no known carcinogenic chemicals in this product

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available.
<b>Developmental Effects</b>	No information available.
<b>Target Organs</b>	Eyes Skin Respiratory system
<b>Other Adverse Effects</b>	The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information
<b>Endocrine Disruptor Information</b>	None known

**SECTION 12. ECOLOGICAL INFORMATION****Toxicity****Ecotoxicity effects** Do not empty into drains**Persistence and degradability**

No information available

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Results of PBT and vPvB assessment****Other adverse effects**

No information available

A23187 (free acid)

Revision Date 15-Dec-2011

**SECTION 13. DISPOSAL CONSIDERATIONS**
Waste treatment methods
**Waste from Residues / Unused Products** Dispose of in accordance with local regulations

**Contaminated Packaging** Empty containers should be taken to local recyclers for disposal

**SECTION 14. TRANSPORT INFORMATION**
IMDG/IMO

<b>UN-No</b>	UN2811
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	Toxic solid, organic, n.o.s

ADR

<b>UN-No</b>	UN2811
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	Toxic solid, organic, n.o.s

IATA

<b>UN-No</b>	UN2811
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	Toxic solid, organic, n.o.s

**SECTION 15. REGULATORY INFORMATION**
Safety, health and environmental regulations/legislation specific for the substance or mixture
International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
4-Benzoxazolecarboxylic acid, 5-(methylamino)-2-[[[3,9,11-trimethyl-8-[1-methyl-2-oxo-2-(1H-pyrrol-2-yl)ethyl]-1,7-dioxaspiro[5.5]undec-2-yl]methyl]-, [6S-[6.alpha.(2S*,3S*),8.beta.(R*),9.beta.,11.alpha	258-084-1	-		-	-	-	-	-	X	-	-

A23187 (free acid)

Revision Date 15-Dec-2011

**Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**CHINA** - China Inventory of Existing Chemical Substances**AICS** - Inventory of Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**Chemical Safety Assessment****SECTION 16. OTHER INFORMATION****Full text of R-phrases referred to under sections 2 and 3**

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 15-Dec-2011

Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet