

# MATERIAL SAFETY DATA SHEET

**PRODUCT:** A23187 FREE ACID

**PRODUCT USAGE:** This product is supplied with the intention that it is for laboratory research use only. It must not, under any circumstances, be used for human, drug, food, cosmetic, agricultural, domestic or any other use. This product must only be handled and used by suitably qualified personnel in an appropriately equipped laboratory.

**SECTION 1. ----- CHEMICAL IDENTIFICATION-----**

CATALOG #: A-1020  
NAME: A23187 FREE ACID

**SECTION 2. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----**

CAS #: 52665-69-7  
MF:  $C_{29}H_{37}N_3O_6$   
EC NO: 258-084-1

**SYNONYMS**

A 23187 \* ANTIBIOTIC A23187 \* CALCIMYCIN \* CALCIUM IONOPHORE A  
23187 \* IONOPHORE A23187 \*

**SECTION 3. ----- HAZARDS IDENTIFICATION -----**

**LABEL PRECAUTIONARY STATEMENTS**

HARMFUL  
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
CAUSES SEVERE IRRITATION.  
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF  
WATER AND SEEK MEDICAL ADVICE.  
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE  
PROTECTION.

**SECTION 4. ----- FIRST-AID MEASURES-----**

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS  
CONSCIOUS.  
CALL A PHYSICIAN.  
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.  
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER

FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.

IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

**SECTION 5. ----- FIRE FIGHTING MEASURES -----**

EXTINGUISHING MEDIA

WATER SPRAY.

CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

**SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----**

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.

SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.

AVOID RAISING DUST.

VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

EVACUATE AREA.

**SECTION 7. ----- HANDLING AND STORAGE-----**

REFER TO SECTION 8.

**SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----**

SAFETY SHOWER AND EYE BATH.

MECHANICAL EXHAUST REQUIRED.

WASH THOROUGHLY AFTER HANDLING.

DO NOT BREATHE DUST.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

AVOID PROLONGED OR REPEATED EXPOSURE.

NIOSH/MSHA-APPROVED RESPIRATOR.

COMPATIBLE CHEMICAL-RESISTANT GLOVES.

CHEMICAL SAFETY GOGGLES.

STORE IN A COOL DRY PLACE.

KEEP TIGHTLY CLOSED.

**SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----**

DATA NOT AVAILABLE

**SECTION 10. ----- STABILITY AND REACTIVITY -----**

STABILITY

STABLE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE

NITROGEN OXIDES

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

**SECTION 11. ----- TOXICOLOGICAL INFORMATION -----**

ACUTE EFFECTS

CAUSES SEVERE SKIN IRRITATION.

CAUSES SEVERE EYE IRRITATION.

MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER  
RESPIRATORY TRACT.

HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

DEPENDING ON THE INTENSITY AND DURATION OF EXPOSURE, EFFECTS MAY  
VARY FROM MILD IRRITATION TO SEVERE DESTRUCTION OF TISSUE.

THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY  
INVESTIGATED.

RTECS #: DM4676000

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))-

TOXICITY DATA

IPR-RAT LD50:9200 UG/KG

NETEEC 9,99,1987

IPR-MUS LD50:10 MG/KG

37ASAA 3,47,1978

IVN-MUS LD50:4500 UG/KG

BBACAQ 469,281,1977

TARGET ORGAN DATA

SENSE ORGANS AND SPECIAL SENSES (PTOSIS)

BEHAVIORAL (MUSCLE WEAKNESS)

LUNGS, THORAX OR RESPIRATION (DYSPNAE)

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES  
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR  
COMPLETE INFORMATION.

**SECTION 12. ----- ECOLOGICAL INFORMATION -----**

DATA NOT YET AVAILABLE.

**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**

DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND  
BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND  
SCRUBBER.

OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

**SECTION 14. ----- TRANSPORT INFORMATION -----**

CONTACT A.G. SCIENTIFIC, INC. FOR TRANSPORTATION INFORMATION.

**SECTION 15. ----- REGULATORY INFORMATION -----**

EUROPEAN INFORMATION

HARMFUL

R 20/21/22

HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

S 26

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.

S 36/37/39

WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

**SECTION 16. ----- OTHER INFORMATION-----**

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE.

A.G. SCIENTIFIC, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.