

**SIGMA-ALDRICH**

SIGMA CHEMICAL COMPANY  
POST OFFICE BOX 14508  
SAINT LOUIS, MISSOURI 63178, USA

SEP 04 1996

ATTN: SAFETY DIRECTOR  
UNIVERSITY OF WISCONSIN  
WHITEWATER  
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WHITEWATER WI 53190-0296

EMERGENCY PHONE 1-314-771-5765

DATE 08/23/96  
CUST#: 2-097-94804  
PO#: MCARD 08/21/96

M A T E R I A L S A F E T Y D A T A S H E E T PAGE 1

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: C7522  
NAME: CALCIUM IONOPHORE A23187 FREE ACID

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 52665-69-7  
MF: C29H37N3O6  
EC NO: 258-084-1

SYNONYMS

A 23187 \* ANTIBIOTIC A23187 \* CALCIMYCIN \* 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.  
IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER  
FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND  
SHOES. CALL A PHYSICIAN.  
IF INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT,  
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

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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY

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CATALOG #: C7522  
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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.

SECTION 7. - - - - - H A N D L I N G   A N D   S T O R A G E - - - - -

REFER TO SECTION 8.

SECTION 8. - - - - - E X P O S U R E   C O N T R O L S / P E R S O N A L   P R O T E C T I O N - - - - -

NIOSH/MSHA-APPROVED RESPIRATOR.  
USE ONLY IN A CHEMICAL FUME HOOD.  
COMPATIBLE CHEMICAL-RESISTANT GLOVES.  
CHEMICAL SAFETY GOGGLES.

SECTION 9. - - - - - P H Y S I C A L   A N D   C H E M I C A L   P R O P E R T I E S - - - - -

APPEARANCE AND ODOR  
SOLID.

PHYSICAL PROPERTIES  
MELTING POINT: 186-188'C  
SOLUBILITY:  
SOLUBLE-CHLOROFORM

SECTION 10. - - - - - S T A B I L I T Y   A N D   R E A C T I V I T Y - - - - -

STABILITY  
STABLE.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
THERMAL DECOMPOSITION MAY PRODUCE CARBON MONOXIDE, CARBON DIOXIDE,  
AND NITROGEN OXIDES.

HAZARDOUS POLYMERIZATION  
WILL NOT OCCUR.

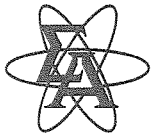
SECTION 11. - - - - - T O X I C O L O G I C A L   I N F O R M A T I O N - - - - -

ACUTE EFFECTS  
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.  
CAUSES SEVERE IRRITATION.  
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),

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CATALOG #: C7522  
NAME: CALCIUM IONOPHORE A23187 FREE ACID  
(6S-(6-ALPHA(2S\*, 3S\*), 8-BETA(R\*),  
9-BETA, 11-ALPHA))-

TOXICITY DATA  
IPR-RAT LD50: 9200 UG/KG                      NETEEC 9,99,87  
IPR-MUS LD50: 10 MG/KG                      37ASAA 3,47,78  
IVN-MUS LD50: 4500 UG/KG                      BBACAQ 469,281,77

TARGET ORGAN DATA  
SENSE ORGANS AND SPECIAL SENSES (PTOSIS)  
BEHAVIORAL (MUSCLE WEAKNESS)  
LUNGS, THORAX OR RESPIRATION (DYSPPNAE)  
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 SIGMA CHEMICAL COMPANY 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. SIGMA SHALL NOT BE  
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P A G E   4

CATALOG #:  
NAME:

C7522  
CALCIUM IONOPHORE A23187 FREE ACID

P.O. BOX 355  
MILWAUKEE, WISCONSIN 53201, USA

MATERIAL WAS SHIPPED TO THIS ADDRESS:

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