



Designed Nutritional

P R O D U C T S

Organic Germanium (Ge-132)

Bis (2-carboxyethylgermaniumsesequioxide)

Catalog Number 8014

SAFETY DATA SHEET

EMERGENCY RESPONSE TELEPHONE NUMBERS:

801 224-4518 – 9:00AM TO 5:00 PM MON-FRI MOUNTAIN TIME ZONE

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----IDENTIFICATION----

PRODUCT NAME: BIS(2-CARBOXYETHYLGERMANIUMSESEQUIOXIDE)

ALTERNATIVE/TRADE NAMES: CARBOXYETHYLGERMANIUM SESEQUIOXIDE; 3,3'-

(1,3-DIOXO-1,3-DIGERMOXANEDIYL)-BIS-PROPIONIC ACID; 3,3'-(1,3-DIOXO-1,3-DIGERMOXANYLENE)-

BIS-PROPIONIC ACID; GE-132; GERMANIUM SESEQUIOXIDE; 3,3'-(GERMANOIC ANHYDRIDE)

DIPROPIONIC ACID; ORGANIC GERMANIUM; mu-TRIOXO-BIS-(beta-CARBOXYETHYL)-GERMANIC ANHYDRIDE

PRODUCT NUMBER: 8014

FORMULA WEIGHT: 339.32

CAS NUMBER: 12758-40-6 & 27031-8 FORMULA: C6-H10-Ge2-07

----TOXICITY HAZARDS----

RTECS# UF2030700

INTRAPERITONEAL: MOUSE; LD50:6800 mg/kg; BEHAVIORAL EFFECT NOTED

INTRAVENOUS; MOUSE; LD50:2110 MG/KG; NO TOXIC EFFECT NOTED

INTRAVENOUS; RAT; LD50:3200 mg/kg; NO TOXIC EFFECT NOTED

ORAL; MOUSE; LD50: >6300 mg/kg; NO TOXIC EFFECT NOTED

ORAL; RAT; LD50: >10,000 mg/kg; NO TOXIC EFFECT NOTED

6 MONTH CHRONIC ORAL: RAT: 3000 mg/kg/day; NO TOXIC EFFECT NOTED

6 MONTH CHRONIC INTRAVENOUS; DOG: 500 mg/kg/day; NO TOXIC EFFECT NOTED

PHARMACOKINETICS: ORAL: RAT: 100 mg/kg, 30% ABSORPTION 3 hr. PEAK BLOOD, 100% EXCRETED

UNCHANGED IN THE URINE 72 hrs. WITH NO EVIDENCE OF METABOLITES. *PROC 11TH INT CONG.*

CHEMOTHER., 1980, 1527-1529

----HEALTH HAZARD DATA----

ACUTE EFFECTS OF EXPOSURE

INHALATION MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT.

MAY CAUSE EYE IRRITATION. INGESTION OF REASONABLE AMOUNTS OR CONTACT WITH THE SKIN

SHOULD NOT CAUSE ANY ILL EFFECTS.

FIRST AID:

CONTACT WITH EYES MAY CAUSE IRRITATION, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR UP TO 15 MINUTES.

IN CASE OF CONTACT WITH SKIN IN WHICH IRRITATION RESULTS, WASH WITH SOAP AND WATER.

IF INHALED, REMOVE TO FRESH AIR. TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

CALL A PHYSICIAN IF ADVERSE REACTION PERSISTS.

----PHYSICAL DATA----

MELTING POINT: > 320°C

SOLUBILITY IN WATER: 1:19 mg/100mL at 31°C

APPEARANCE: SNOW WHITE, MICROCRYSTALLINE, ODORLESS SOLID

Designed Nutritional Products

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P.O. Box 1242 Orem, UT 84059-1242
Tel: (801) 224-4518 Fax: (801) 434-8270

MATERIAL SAFETY DATA SHEET

NAME: BIS (2-CARBOXYETHYLGERMANIUMSESQUIOXIDE)

PRODUCT NUMBER 8014

----FIRE AND EXPLOSION DATA----

EXTINGUISHING MEDIA:

NONCOMBUSTIBLE. USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE CONDITIONS;

SPECIAL FIRE FIGHTING PROCEDURES:

NONE.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NONE.

----REACTIVITY DATA----

STABILITY: STABLE

INCOMPATIBILITIES:

STRONG OXIDIZING AGENTS

STRONG ACIDS

STRONG BASES

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CARBON DIOXIDE AND CARBON MONOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

----SPILL OR LEAK PROCEDURE----

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

WEAR DUST MASK, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS, AND GLOVES.

SWEEP UP, PLACE IN A CONTAINER AND HOLD FOR WASTE DISPOSAL. WASH SPILL SITE AFTER

MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD:

BURY IN A LANDFIL SITE APPROVED FOR THE DISPOSAL OF CHEMICAL WASTE.

OBSERVE ALL FEDERAL, STATE, AND LOCAL DISPOSAL REGULATIONS.

----PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE----

CHEMICAL SAFETY GOGGLES

RUBBER GLOVES

OSHA/MSHA-APPROVED RESPIRATOR

SAFETY SHOWER AND EYE BATH

MECHANICAL EXHAUST

AVOID BREATHING DUST

AVOID CONTACT WITH EYES

WASH THOROUGHLY AFTER HANDLING

KEEP TIGHTLY CLOSED

STORE IN A COOL, DRY PLACE

----ADDITIONAL PRECAUTIONS AND COMMENTS----

ALWAYS USE APPROPRIATE PROTECTIVE EQUIPMENT AND FOLLOW SAFE LABORATORY PRACTICES DURING THE HANDLING OR DISPOSAL OF THIS MATERIAL.

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