

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY INFORMATION

Product name: Component D2

Contact:

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SECTION 2: HAZARD IDENTIFICATION

GHS classification of the substance/mixture:

Acute toxicity - Dermal (Category 4)

For full text of the H-Statements mentioned in this Section, see Section 16.

GHS label elements, including precautionary statements:

Hazard pictograms:



Signal word:

Warning

GHS label elements, including precautionary statements:

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS SUBSTANCE

Substance/Mixture: Mixture

Hazardous Ingredients

Chemical Name	CAS-No.	GHS-US Hazardous Classification	Concentration (%)
Dibutyl-cAMP	16980-89-5	Acute Tox. 4	<5

SECTION 4: FIRST AID MEASURES

Description of necessary measures.

General advice	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Inhalation	Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
Ingestion	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	None.

Specific hazards arising from the chemical

Specific hazards arising from the chemical	No information available.
Hazardous combustion products	Carbon oxides. Nitrogen oxides (NO _x).

Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For personal protection use safety glasses, lab coat, and gloves. Ensure adequate ventilation, especially in confined areas.

Environmental precautions:

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up:

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use personal protective equipment as required. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

Advice on safe handling	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.
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Conditions for safe storage, including any incompatibilities:

Storage conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store at -20 °C.
Incompatible materials	None known based on information supplied.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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

Engineering Controls Showers
 Eyewash stations
 Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.
Skin and Body Protection Wear protective gloves and protective clothing.
Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Aqueous solution.
Odor: No data available.
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.
Flash point: No data available.
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Upper/lower flammability or explosive limits: No data available.
Vapor pressure: No data available.
Vapor density: No data available.
Relative density: No data available.
Solubility(ies): No data available.
Partition coefficient: n-octanol/water: No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.
Explosive properties: No data available.
Oxidizing properties: No data available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Stable under recommended transport and storage conditions.

Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Conditions to avoid: Heat, moisture, and direct sunlight.
Incompatible materials: Strong acids/alkalis, strong oxidizing/reducing agents.
Hazardous decomposition products: Carbon oxides. Nitrogen oxides (NO_x).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	No information available.
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Numerical measures of toxicity - Product Information

Unknown acute toxicity	No information available
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The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	5000 mg/kg
ATEmix (dermal)	2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	May cause long lasting harmful effects to aquatic life.
Bioaccumulative potential:	No data available.
Mobility in soil:	No data available.
Other adverse effects:	None.

SECTION 13: DISPOSAL INFORMATION

Disposal methods: Dispose of waste in accordance to applicable national, regional, or local regulations.

Contaminated packaging: Dispose in the same manner as unused product.

Special precautions: Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilt material to soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION**DOT (US)**

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

SECTION 15: REGULATORY INFORMATION**International Inventories:**

All of the components in the product are on the following Inventory lists
Europe (EINECS/ELINCS/NLP) South Korea (KECL): China (IECSC)

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Dibutyl- cAMP	-	-	-	X	-	-	X	X	-	-

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations:**SARA 302 Components.**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No

US State regulations:**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

	CAS-No.
Water	7732-18-5
Albumin, bovine serum	-
Disodium hydrogenorthophosphate	7558-79-4

New Jersey Right To Know Components

	CAS-No.
Water	7732-18-5
Albumin, bovine serum	-

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

The information provided herein is based on sources believed to be reliable as of 9/19/2017 and pertains only to the material designated. Elixirgen Scientific, Inc. makes no warranty or representation to its completeness, accuracy, or currency, and assumes no liability resulting from its use. This material is intended for use by persons with pertinent technical skills for its intended use, the product's safe use, and the product's proper disposal. Disposal of hazardous material may be subjected to federal, state or local laws or regulations.

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