

Material Safety Data Sheet

GERMABEN II

Chemical Products Company Identification

Product Name: GERMABEN®II
CAS Registry Number: 57-55-6; 78491-02-8; 99-76-3; 94-13-3
CAS Registry Name: 1,2-Propanediol; Urea. N-(1,3-bis(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl)-N,N'-bis(hydroxymethyl)-; Benzoic acid, 4-hydroxy-, 1-methyl ester; Benzoic acid, 4-hydroxy-, propyl ester
Synonyms: Propylene Glycol; Diazolidinyl Urea; Methylparaben; Propylparaben (INCI NAMES)
Product Use: Preservative

Composition Information/Hazardous Ingredients

Component:	ACGIH Threshold Limit Values Data – Time	ACGIH Threshold Limit Values Data - Short Term	ACGIH Exposure Limits
1.2-Propaneol	Weighted Average (TWA):	Exposure Limit (STEL):	
5745.8 (58)	No TLV/TWA Established	No TLV/TWA Established	
	No TLV/STEL Established	No TLV/STEL Established	

urea, N-(1.3-bis(hydroxymethyl)-2,5-dioxo-4-imidazolidinyl)-N,N'

bis(hydroxymethyl)- 78491-02-8 (30)

Statement of Hazardous Nature: Causes mild eye irritation. (Propylene Glycol & Diazolidinyl urea) Causes mild skin irritation. (Propylene Glycol)

Hazardous Identification

Emergency Overview

CAUTION! CAUSES MILD EYE IRRITATION. CAUSES MILD SKIN IRRITATION.

Hazard Overview

Target Organs: Skin/ Eyes
Primary Entry Routes: Dermal - skin. Eyes.
Acute Health Hazards: Causes mild eye irritation. Causes mild skin irritation.
Chronic Health Hazards: Unknown

Signs and Symptoms of overexposure

Eye Contact: Causes mild eye irritation
Skin Contact: Causes mild skin irritation.
Ingestion: Not a hazard under normal use conditions.

Inhalation: Not a hazard under normal use conditions.

First Aid Measures

Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Skin Contact:	Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if symptoms occur.
Ingestion:	Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation:	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Fire Fighting Measures

NFPA Rating:	Health: 1 Flammability: 1 Reactivity: 0
Flash Point (°F):	199.4
Extinguishing Media:	All standard firefighting media
Unusual Fire/Explosion Hazards:	Unknown
Special Protective Equipment:	Fire fighters should wear full protective clothing, including self-contained breathing equipment.
HMIS RATING:	
HEALTH	1
FLAMMABILITY	1
REACTIVITY	0

Accidental Release Measures

Personal Precautionary Measures:	Use Appropriate protective equipment.
Procedure for Cleaning/Absorption:	Contain spill with sand or other inert materials

Handling/Storage

Handling:	Avoid contact with skin and eyes. Wash thoroughly with soap and water after handling. May produce sensitization to damaged exposed skin (as sold) (See Toxicological Section 11). Wear appropriate PPE.
Storage:	Keep containers tightly closed when not in use. Store in a cool, dry place, out of direct sunlight.

Exposure Controls/Personal Protection

Engineering Controls:	Use in a well ventilated area.
Respiratory Protection:	Use in a well ventilated area
Hand Protection:	All cleanable impervious glove types are acceptable.
Eye Protection:	Safety glasses.

Physical Chemical Properties

Physical State:	Liquid
Color:	CLEAR TO PALE YELLOW
Odor:	CHARACTERISTIC, MILD
pH:	Not Determined
Specific Gravity:	1.18
Boiling Point (°F):	369
Melting Point (°F):	Not determined.
Vapor Pressure:	0.22 mm Hg @ 20°C
Solubility:	1.59/1009 @25°C

Stability & Reactivity

Chemical Stability:	Stable under normal conditions of handling, use and transportation.
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	None anticipated

Toxicological Information

Toxicity Test:

Acute Oral LD60 (mg/kg):	20,000 (Propylene Glycol) 2,570 (Diazolidinyl Urea) >5,600 (Methylparaben) 6,332 (Propylparaben)
Acute Dermal LD50 (mg/kg):	>2,000 (Diazolidinyl urea) (rabbit) 31,000 (Propylene Glycol) (rabbit)
Acute Inhalation LC50 (mg/kg):	1.3 mg/kg (rat) (Diazolidinyl urea, 50% Aqueous solution)
Sensitization:	Non-sensitizing (0.5% aqueous solution) (Human RIFT) (Diazolidinyl urea) Non-sensitizing to guinea pigs (0.1% aqueous solution) (Diazolidinyl urea) Slight sensitizer to guinea skin In Guinea Pig Maximization Test (5% aqueous solution injection) (Diazolidinyl urea)
Mutagenicity:	Non-mutagenic (Propylene Glycol) Non-mutagenic (Ames assay). (Diazolidinyl urea) Non-mutagenic (Ames assay & Dominant lethal assay) (Methylparaben). Nonmutagenic Ames assay with and without metabolic activation (Propylparaben)
Teratogenicity:	Non-teratogenic (Propylene Glycol) Non-teratogenic in rats dosed orally with 125, 250 or 500 mg/kg 9 day. Non-teratogenic in rats receiving dermally 30-300 mg/kg/day from days 6-15 of gestation. (Diazolidinyl urea) Non-teratogenic in rabbits dosed orally with 3-300 mg/kg. Non-teratogenic in rats and mice receiving 5-500 mg/kg gestation days 6-18. (Methylparaben)
Skin Irritation:	Mildly irritating to rabbit skin at 100%. (Methylparaben) Minimally irritating to rabbit skin (0.3% in product formulation). (Propylparaben) Mildly irritating to human skin (Propylene glycol). Non-irritating to human skin (0.5% aqueous solution. Diazolidinyl urea)

Eye Irritation:	Non-irritating to rabbit (5% aqueous solution) and guinea pig skin (100% wettable powder) (Diazolidinyl urea) Mildly irritating to rabbit eye (Propylene glycol) Miry irritating to rabbit eye (50% aqueous solution) (Diazolidinyl urea) Non-irritating to rabbit eye (1 & 5 % aqueous solutions) (Diazolidinyl urea) Practically non-irritating to rabbit eye (100% Methylparaben)
Other Information:	Minimally irritating to rabbit eye. (up to 8% in formulations) (Propylparaben) Phototoxicity: Non-phobtoxic (0.5% Diazolidinyl urea) Phototoxicity: Non-phototoxic (Propylparaben) Photatotoxicity: Non-phototoxic (Methylparaben) Subohronic Oral Toxicity: Rats fed diets containing 0-60,000 ppm of Propylene Glycol for 15 weeks. The Propylene Glycol in the feed corresponded to a dose of 2.50g/day. No significant differences were found between the control & Propylene Glycol dosed animals. Subchronic Oral Toxicity: Rat 90; 10, 25, 100 mg/kg/day - no observed adverse effect level (NOAEL) 100 mg/kg/day (Diazolidinyl urea) 2tlday; 100, 300, 900 mg/kg. no observed adverse effect level (NOAEL) 100 mg/kg/day (Diazotidinyl urea) Photosensitization: Non-sensitizing to guinea pig skin. (0.5% Diazolidinyl urea)
Biodegradability:	Not determined.

Ecological INFORMATION

Aquatic Toxicity:	Daphnia Magna, 48 hr. EC50: 34.9 mg/L; NOEL 21.6 mg/L Sluegillis, 96 hr. LC50: X100 mgfL; NOEL 60mg/L Rainbow trout, 96 hr. LC50: >100 mg/L; NOEL 100 mg1L Acute Oral LD60: X2,250 mg/kg (Northern bobwhite). 5-Day sub acute dietary studies produced no evidence of toxicity at concentrations up to 5,620 ppm. (Diazolidinyl urea)
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Disposal Consideration

Disposal of Waste Method:	Federal. state and local disposal laws and regulations will determine the proper waste disposaVrecycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.
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Transport Information

Land Transportation:

DOT (Non-Bulk):

DOT Shipping Name: NOT REGULATED

UNINA Number- NONE

Hazard Class: NONE

DOT (Bulk):

DOT Shipping Name: NOT REGULATED

UNINA Number. NONE

Hazard Class: NONE

Air Transportation IATAI:

Proper Shipping Name: Not Regulated

UN Number: NONE

Hazard Classification: None

Sea Transportation 0191

Proper Shipping Name: NOT REGULATED

UNIID Number. None

Hazard Classification: NONE

TDG (Canada):

Proper *Shipping* Name: NOT REGULATED

UN Number: NONE

Hazard Class: NONE

Disposal Consideration

TSCA Inventory List -

This product and/or its components is listed on TSCA.

California Proposition 65 CALPROP.
Carcinogens S Reproductive
Toxicity (CRT) List -

None of the components of this product is listed on

WHMIS Ingredient Disclosure
Disclosure List -

one or more components of this product is listed on WHMIS Ingredient
ist.

Canada DSL Inventory List -

This product and/or its components is listed on DSL.

Canada NDSL Inventory List -

This product and/or its components is not listed on NDSL

Japan Inventory of Existing &
on ENCS. New Chemical Substances
(ENCS) -

This product end/or its components is not listed

Australia Inventory of Chemical
listed on AICS. Substances (AICS) List -

This product and/or its components is

EU EINECS List -

This product and/or its components is listed on EINECS.

EU ELINCS List -

This product and/or its components is not listed on ELINCS.