SAFETY DATA SHEET

DL-Panthenol (Pro-Vitamin B5)

Prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and GHS

SDS DATE	VERSION	PRODUCT CODE (SKU)	CAS NO.
11/03/2026	1.0 (Preliminary)	DLPan-0.5lb	16485-10-2

SECTION 1: IDENTIFICATION

1.1 Product identifier

Product name	**DL-Panthenol (Pro-Vitamin B5)**
Product code (SKU)	DLPan-0.5lb
Chemical name / synonyms	Provitamin B5; dexpanthenol (racemic); 2,4-dihydroxy-N-(3-hydroxypropyl)-3,3-dimethylbutanamide; INCI: Panthenol
CAS No.	16485-10-2
Product form	Substance

1.2 Recommended use and restrictions on use

Recommended use	Raw material for formulation and manufacture of cosmetic, personal-care and holistic products.
Uses advised against	None identified.

1.3 Responsible party and supplier

Supplier / responsible party	**LA Ingredients** 853 Sandhill Avenue Carson, CA 90746, USA
Email / website	support@laingredients.com laingredients.com

1.4 Emergency telephone number

Emergency telephone (24 hours)	**+1 656 232 3588** Hazmat Line Emergency Response (24 hours a day, 7 days a week)

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture (GHS / OSHA HCS 2012)

Not classified as hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200) and GHS, based on the source data.

2.2 GHS label elements

Signal word	None
Hazard statement(s)	None. Not applicable.
Precautionary statement(s)	None required for classification. See Sections 7 and 8 for good-practice handling.

2.3 Hazards not otherwise classified (HNOC)

May cause mild irritation of the eyes (and, according to one source, the skin). Fine dust may form combustible mixtures with air.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance. Single component.

Chemical name	CAS No.	EC No.	Concentration	GHS classification
DL-Panthenol	16485-10-2	240-540-6	≈ 100 %	Not classified

SECTION 4: FIRST-AID MEASURES

4.1 Description of first-aid measures

General advice	If symptoms develop or persist, get medical attention. Show this SDS to the medical professional.
Inhalation	Move the person to fresh air. Get medical attention if coughing, irritation or other symptoms develop or persist.
Skin contact	Remove contaminated clothing. Wash with soap and plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Rinse with plenty of water for at least 15 minutes, holding the eyelids open. Remove contact lenses if present and easy to do. Get medical attention if irritation persists.
Ingestion	Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur or if a large amount was swallowed.

4.2 Most important symptoms and effects, acute and delayed

Eyes: mild irritation. Skin: mild irritation possible.

Ingestion of large amounts may cause nausea, vomiting, diarrhea or abdominal cramps.

4.3 Immediate medical attention and special treatment

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable	Water spray (fog), dry chemical, foam, carbon dioxide.
Unsuitable	Direct or heavy water stream.

5.2 Special hazards arising from the substance or mixture

Combustible at high temperature; fine dust may form combustible mixtures with air. Combustion products: smoke, carbon monoxide, carbon dioxide and nitrogen oxides.

5.3 Advice for fire-fighters

Wear self-contained breathing apparatus (SCBA) and full protective clothing. Cool exposed containers with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear gloves, eye protection and, where dust is generated, a dust mask (see Section 8). Avoid dust formation.

6.2 Environmental precautions

Prevent entry into drains, sewers and waterways. Notify the appropriate authorities if a large release reaches water.

6.3 Methods and materials for containment and cleaning up

Avoid dust formation. Sweep or vacuum up spilled material into suitable, closed containers for disposal. Remove ignition sources.

Ventilate and wash the spill site after pickup. Do not flush into sewers or streams.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with eyes, skin and clothing. Avoid dust formation and breathing dust; guard against electrostatic charge; keep away from ignition sources.

Keep containers closed when not in use. Wash hands after handling. Do not eat, drink or smoke in work areas. Avoid bacterial contamination.

7.2 Conditions for safe storage, including incompatibilities

Store at room temperature (below 25 °C) in a clean, dry place in the original tightly closed container, protected from light, humidity and direct sunlight. Suitable materials: stainless steel, aluminum, enamel glass, polyethylene. Store away from acids, bases and strong oxidizers.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No occupational exposure limit established for this product.

8.2 Appropriate engineering controls

Normal general ventilation is adequate. Use local exhaust ventilation if dust or mist is generated.

8.3 Individual protection measures / personal protective equipment (PPE)

Eye / face	Safety glasses; chemical goggles with side splash protection where splashing or dust is likely.
Skin / hands	Protective gloves recommended (for example nitrile or other chemically resistant gloves).
Body	Normal work clothing.
Respiratory	Not required under normal conditions. Use a particle mask or respirator for open handling of large quantities.
Hygiene	Wash hands after handling. Do not eat, drink or smoke when using this product. Eyewash and washing facilities should be accessible.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid (crystalline powder)
Color	White to off-white
Odor	Faint / characteristic
Odor threshold	No data available

pH	5.0 – 8.0 (5 % aqueous solution)
Melting point / freezing point	64.5 – 69 °C
Boiling point / range	No data available
Flash point	Not applicable
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 / specific gravity	No data available
Solubility in water	Soluble
Solubility in other solvents	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	Fine dust may form combustible / explosive mixtures with air
Oxidizing properties	Non-oxidizing

9.2 Other information

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	No dangerous reactions known under normal conditions of use.
10.2 Chemical stability	Stable under recommended storage and handling conditions.
10.3 Possibility of hazardous reactions	Hazardous polymerization will not occur.
10.4 Conditions to avoid	Dust formation, ignition sources, excessive heat, sunlight, moisture and open air exposure.
10.5 Incompatible materials	Acids and bases (hydrolysis); strong oxidizing agents.
10.6 Hazardous decomposition products	Smoke, carbon monoxide, carbon dioxide and nitrogen oxides in a fire; toxic and corrosive gases possible.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure	Eye and skin contact; inhalation of dust; ingestion.

Acute toxicity	Oral LD50 (mouse): > 10,000 mg/kg. Not classified.
Skin corrosion / irritation	Not classified. Not an irritant according to one source; may cause irritation according to the other.
Serious eye damage / irritation	Not classified. May cause mild irritation.
Respiratory or skin sensitization	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified. No component present at 0.1% or more is listed as a carcinogen by IARC, NTP, ACGIH or OSHA.
Reproductive toxicity	Not classified.
STOT – single exposure	Not classified.
STOT – repeated exposure	Not classified.
Aspiration hazard	Not classified.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity	No data available.
12.2 Persistence and degradability	Readily biodegradable according to one source.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 PBT and vPvB assessment	No data available.
12.6 Other adverse effects	Non-hazardous, but avoid direct release to the environment; do not flush into sewers or streams.

SECTION 13: DISPOSAL CONSIDERATIONS

Product	Dispose of in accordance with federal, state and local regulations. Do not pour into drains or sewers unless permitted. Waste classification may change if the product is used or altered.
Contaminated packaging	Empty containers completely. Dispose of as unused product, or recycle where facilities exist.

SECTION 14: TRANSPORT INFORMATION

DOT (US)	Not regulated as dangerous goods.
IMDG (sea)	Not regulated as dangerous goods.
IATA (air)	Not regulated as dangerous goods.
UN number / packing group	Not applicable.

SECTION 15: REGULATORY INFORMATION

OSHA HCS	Not classified as hazardous under 29 CFR 1910.1200 based on the source data.
TSCA	Listed on the TSCA Inventory.
SARA 302 / 311-312 / 313	No SARA 313 reportable components per the source data. No SARA 311/312 hazard categories identified.
California Proposition 65	Panthenol is not a listed Proposition 65 chemical. One source notes that trace contaminants (heavy metals and arsenic, each below 10 ppm) may be present. To be confirmed with the supplier for the final SDS.
Compliance	Compliance with all applicable federal, state and local laws and regulations remains the responsibility of the user.

SECTION 16: OTHER INFORMATION

Date of issue / last revision	11/03/2026
Version	1.0 (Preliminary)
Supersedes	**None (first issue)**
Prepared by	LA Ingredients, 853 Sandhill Avenue, Carson, CA 90746 | support@laingredients.com
Basis of this SDS	PRELIMINARY. Compiled by LA Ingredients from two published safety data sheets for equivalent material (DL-panthenol powder, CAS 16485-10-2), revisions dated 07/15/2018 and 01/12/2021. The supplier-specific SDS was not yet available. This SDS will be superseded when it is.

Hazard ratings (as given by the manufacturer)

NFPA 704	Health 1 | Flammability 1 | Instability 0

Key to abbreviations

CAS = Chemical Abstracts Service; GHS = Globally Harmonized System; OSHA HCS = OSHA Hazard Communication Standard; PEL = permissible exposure limit; TLV = threshold limit value; TWA = time-weighted average; LD50 / LC50 / EC50 = median lethal dose / lethal concentration / effective concentration; PBT / vPvB = persistent, bioaccumulative, toxic / very persistent, very bioaccumulative; OECD = Organisation for Economic Co-operation and Development; DOT = US Department of Transportation; IMDG = International Maritime Dangerous Goods Code; IATA = International Air Transport Association; TSCA = Toxic Substances Control Act; SARA = Superfund Amendments and Reauthorization Act; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; STOT = specific target organ toxicity; HNOC = hazard not otherwise classified; HMIS = Hazardous Materials Identification System; NFPA = National Fire Protection Association; IARC = International Agency for Research on Cancer; NTP = National Toxicology Program; ACGIH = American Conference of Governmental Industrial Hygienists; PNOC = particulates not otherwise classified; USP = United States Pharmacopeia; FCC = Food Chemicals Codex; AIHA WEEL = American Industrial Hygiene Association Workplace Environmental Exposure Level.

Notes

This is a **Preliminary** SDS compiled by LA Ingredients from published safety data sheets for equivalent material, issued by two independent suppliers, because the product-specific supplier SDS was not yet available. Where the sources differed, the more conservative (more protective) value was used. Physical values may differ from the lot supplied. This SDS will be superseded when the supplier-specific SDS is received.

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