		File name		D-panthenol CLP SDS					
	Standard		tegory	Tec	chnical standard	C	Classification		Safety
		File Number	r Q/>		Q/XF03-13.1.2-2020		Version		F4
XINFU		Effective dat	е	202	20-01-17	F	Page number	,	1
Editor Yu Jianxin		nxin	Revie	wer	Bai Yanbing		Approver	Zha	ng Lianchun
Date 2020-01-08		Date		2020-01-08		Date	2020	0-01-11	

1 Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier:

Identification on the label/Trade name: D-PANTHENOL, D-PANTHENOL, DEXPANTHENOL

Additional identification: dexpanthenol

Identification of the product: CAS# 81-13-0; EC# 201-327-3

Index Number: Not available

REACH registration No.: 01-2119953737-24-0003

1.2 Relevant identified uses of the substance and uses advised against:

#### 1.2.1 Identified uses:

Used in pharmaceutical, food, feed and cosmetic product.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): —

Supplier(Manufacturer): Hangzhou Xinfu Science & Technology Co., Ltd.

Address: No. 9 Shangguafan, Jinnan Distr., Lin'an, Hangzhou, 311301, P.R.China

Contact person(E-mail): info@xinfupharm.com

Telephone: +86-571-63757919

Fax: +86 571 63759260

1.4 Emergency telephone Number: +353 477 3710

Available outside office hours? NO

- 2 Hazards Identification
- 2.1 Classification of the substance/mixture: substance
- 2.1.1 Classification:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
N/A	N/A

For full text of H- phrases: see section 2.2.

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#### 2.2 label elements:

Hazard Pictograms: No hazard pictogram is used.

Signal Word(S): No signal word is used.

Hazard Statement: Not applicable.

Precautionary statement: Not applicable.

#### 2.3 Other hazards:

Not available.

#### 2.4 others

The product is not classified as hazardous according to Hazard Communication Standard (29 CFR 1910.1200)

3 Composition/information on ingredients

Substance/Mixture: Substance

### Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Classification
dexpanthenol	01-2119953737- 24-0003	81-13-0	201-327-3	≥98.0%	Not classified

#### 4 First aid measures

#### 4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

### 4.1.1 In case of inhalation:

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If symptoms persist, call a physician.

#### 4.1.2 In case of skin contact:

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

### 4.1.3 In case of eyes contact:

Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.

### 4.1.4 In case of ingestion:

Clean mouth with water and drink afterwards plenty of water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed:

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The product is not classified as harmful to human health effect.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

- 5 Fire-Fighting measures
- 5.1 Extinguishing media:

Suitable extinguishing media: Use water spray, dry powder, alcohol-resistant foam, dry chemical.

Unsuitable extinguishing media: Not available.

5.2Special hazards arising from the substance or mixture:

Heating or fire can release toxic gas.

5.3Advice for firefighters::

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

- 6 Accidental release measures
- 6.1 Personal precautions, protective equipment and emergency procedures:
- 6.1.1 For non-emergency personnel:

Provide adequate ventilation. Avoid inhalation of vapours. Avoid skin and eye contact. Refer to section 8 of SDS for personal protection details.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if vapours is generated.

6.2 Environmental Precautions:

Try to prevent the material from entering drains or water courses.

6.3 Methods for Containment and Cleaning up:

Absorb with absorbing material (e.g. universal binding agent). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

- 7 Handling and storage
- 7.1 Precautions for safe handling:
- 7.1.1 Protective measures:

Good hygienic practices should be observed. Avoid contact with skin and eyes. Avoid

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breathing vapours. If exposed to high vapours concentration, leave area immediately. Work clothes should be washed separately at the end of each work day. Keep away from sources of ignition. Ensure good ventilation/exhaustion at the workplace.

#### 7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Store at room temperature. No special requirement.

- 7.3 Specific end use(s): Not applicable.
- 8 Exposure Controls/Personal Protection
- 8.1 Control parameters:
- 8.1.1 Occupational exposure limits: Not available.
- 8.1.2 Additional exposure limits under the conditions of use: Not available.
- 8.1.3 DNEL/DMEL and PNEC-Values: Not available.
- 8.2 Exposure controls:
- 8.2.1Appropriate engineering controls:

Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate vapours, use ventilation to keep exposure to airborne contaminants below the exposure limit.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses.

Hand protection: Glove material: for example nitrile rubber; Consider the hazard characteristics of this product and any special workplace conditions when selecting the appropriate type of protective gloves.

Body protection: Protective suit.

Respiratory protection: No personal respiratory protective equipment normally required.

Thermal hazards: Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment. According to local regulations, Federal and official regulations.

9 Physical and chemical properties

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# 9.1 Information on basic physical and chemical properties:

Colour:  Colour:  Colour:  Colour:  A slight characteristic odour  Odour threshold:  Not available  PH (5% water solution):  Melting point/range (°C):  Boiling point/range (°C):  Flash point (°C):  Evaporation rate:  Not available  Flammability limit - lower (%):  Not available  Flammability (solid, gas):  Ignition temperature (°C):  Vapour pressure (25°C):  Vapour density:  Density:  Not available  Not available  Not available  Not available  Not available  Vapour pressure (25°C):  Vapour density:  Not available  Water solubility (g/l):  > 509 g/L at 22 °C  Auto-ignition temperature:  Not available  Viscosity, dynamic (mPa.s):  Not available  Not available  Not available  Not available  Not available  Vater solubility (g/I):  > 1.06at 22 °C  Not available  Not available  Not available  Not available  Viscosity, dynamic (mPa.s):  Not available	Appearance:	Liquid, viscous
Odour threshold:       Not available         pH (5% water solution):       9.0~10.5         Melting point/range (°C):       -25 °C         Boiling point (°C):       235.6 °C         Flash point (°C):       150.5 °C         Evaporation rate:       Not available         Flammability limit - lower (%):       Not available         Flammability (solid, gas):       Not available         Ignition temperature (°C):       Non flammable         Upper/lower flammability/explosive limits:       Not available         Vapour pressure (25°C):       0.000056 Pa         Vapour density:       Not available         Density:       1.2 g/cm³ at 20 °C         Bulk density (kg/m³):       Not available         Water solubility (g/l):       > 509 g/L at 22 °C         n-Octanol/Water (log Po/w):       -1.06at 22 °C         Auto-ignition temperature:       > 400 °C         Decomposition temperature:       Not available         Viscosity, dynamic (mPa.s):       Not available         Explosive properties:       Not available         Molecular Formula:       C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Colour:	Colorless to slightly yellow.
pH (5% water solution):  Melting point/range (°C):  Boiling point/range (°C):  Boiling point/range (°C):  Evaporation rate:  Not available  Flammability limit - lower (%):  Flammability (solid, gas):  Ignition temperature (°C):  Vapour pressure (25°C):  Vapour density:  Density:  Density:  Bulk density (kg/m³):  Water solubility (g/l):  Not available  Vater solubility (g/l):  Not available  Viscosity, dynamic (mPa.s):  Not available  Not available  Viscosity properties:  Not available  Molecular Formula:  C₃H₁₃NO₄	Odour:	a slight characteristic odour
Melting point/range (°C):       -25 °C         Boiling point/range (°C):       235.6 °C         Flash point (°C):       150.5 °C         Evaporation rate:       Not available         Flammability limit - lower (%):       Not available         Flammability (solid, gas):       Not available         Ignition temperature (°C):       Non flammable         Upper/lower flammability/explosive limits:       Not available         Vapour pressure (25°C):       0.000056 Pa         Vapour density:       Not available         Density:       1.2 g/cm³ at 20 °C         Bulk density (kg/m³):       Not available         Water solubility (g/l):       > 509 g/L at 22 °C         n-Octanol/Water (log Po/w):       -1.06at 22 °C         Auto-ignition temperature:       > 400 °C         Decomposition temperature:       Not available         Viscosity, dynamic (mPa.s):       Not available         Explosive properties:       Not available         Oxidising properties:       Not available         Molecular Formula:       C₃H₁₅NO₄	Odour threshold:	Not available
Boiling point/range (°C):  Flash point (°C):  Evaporation rate:  Not available  Flammability limit - lower (%):  Not available  Flammability (solid, gas):  Ignition temperature (°C):  Vapour pressure (25°C):  Vapour density:  Density:  Density:  Not available  Water solubility (g/l):  Vater solubility (g/l):  Auto-ignition temperature:  Not available  Viscosity, dynamic (mPa.s):  Not available	pH (5% water solution):	9.0~10.5
Flash point (°C):  Evaporation rate:  Not available  Flammability limit - lower (%):  Not available  Flammability (solid, gas):  Ignition temperature (°C):  Upper/lower flammability/explosive limits:  Vapour pressure (25°C):  Vapour density:  Not available  Density:  1.2 g/cm³ at 20 °C  Bulk density (kg/m³):  Not available  Water solubility (g/l):  Not available  Vater solubility (g/l):  -1.06at 22 °C  Auto-ignition temperature:  Viscosity, dynamic (mPa.s):  Explosive properties:  Not available  Molecular Formula:  CgH19NO4	Melting point/range (°C):	-25 °C
Evaporation rate:  Flammability limit - lower (%):  Flammability (solid, gas):  Ignition temperature (°C):  Upper/lower flammability/explosive limits:  Vapour pressure (25°C):  Vapour density:  Density:  Density:  1.2 g/cm³ at 20 °C  Bulk density (kg/m³):  Water solubility (g/l):  Not available  Water solubility (g/l):  Not available  Vato-ignition temperature:  Vapour density:  Not available  Vater solubility (g/l):  Not available  Vater solubility (g/l):  Not available  Vato-ignition temperature:  Not available  Viscosity, dynamic (mPa.s):  Explosive properties:  Not available  Oxidising properties:  Not available  Molecular Formula:  CgH19NO4	Boiling point/range (°C):	235.6 °C
Flammability limit - lower (%):  Flammability (solid, gas):  Ignition temperature (°C):  Upper/lower flammability/explosive limits:  Vapour pressure (25°C):  Vapour density:  Density:  Density:  1.2 g/cm³ at 20 °C  Bulk density (kg/m³):  Water solubility (g/l):  Not available  Vater solubility (g/l):  Auto-ignition temperature:  Vapour density:  Not available  Vater solubility (g/l):  Not available  Vater solubility (material periodic perio	Flash point (°C):	150.5 °C
Flammability (solid, gas):  Ignition temperature (°C):  Upper/lower flammability/explosive limits:  Vapour pressure (25°C):  Vapour density:  Density:  Density:  Bulk density (kg/m³):  Water solubility (g/l):  Not available  Vato-ignition temperature:  Vato-ignition temperature:  Viscosity, dynamic (mPa.s):  Explosive properties:  Mot available  Not available	Evaporation rate:	Not available
Ignition temperature (°C):  Upper/lower flammability/explosive limits:  Vapour pressure (25°C):  Vapour density:  Density:  Density:  1.2 g/cm³ at 20 °C  Bulk density (kg/m³):  Water solubility (g/l):  Not available  Vato-ignition temperature:  Vato-ignition temperature:  Viscosity, dynamic (mPa.s):  Not available  Oxidising properties:  Not available  Not available  Oxidising properties:  Not available  Not available	Flammability limit - lower (%):	Not available
Upper/lower flammability/explosive limits:  Vapour pressure (25°C):  Vapour density:  Density:  Density:  1.2 g/cm³ at 20 °C  Bulk density (kg/m³):  Not available  Water solubility (g/l):  -509 g/L at 22 °C  n-Octanol/Water (log Po/w):  -1.06at 22 °C  Auto-ignition temperature:  Not available  Viscosity, dynamic (mPa.s):  Explosive properties:  Not available  Oxidising properties:  Not available  Molecular Formula:  CgH19NO4	Flammability (solid, gas):	Not available
Vapour pressure (25°C):0.000056 PaVapour density:Not availableDensity:1.2 g/cm³ at 20 °CBulk density (kg/m³):Not availableWater solubility (g/l):> 509 g/L at 22 °Cn-Octanol/Water (log Po/w):-1.06at 22 °CAuto-ignition temperature:> 400 °CDecomposition temperature:Not availableViscosity, dynamic (mPa.s):Not availableExplosive properties:Not availableOxidising properties:Not availableMolecular Formula:C9H19NO4	Ignition temperature (°C):	Non flammable
Vapour density:Not availableDensity:1.2 g/cm³ at 20 °CBulk density (kg/m³):Not availableWater solubility (g/l):> 509 g/L at 22 °Cn-Octanol/Water (log Po/w):-1.06at 22 °CAuto-ignition temperature:> 400 °CDecomposition temperature:Not availableViscosity, dynamic (mPa.s):Not availableExplosive properties:Not availableOxidising properties:Not availableMolecular Formula:C9H19NO4	Upper/lower flammability/explosive limits:	Not available
Density:  1.2 g/cm³ at 20 °C  Bulk density (kg/m³):  Not available  Vater solubility (g/l):  -509 g/L at 22 °C  n-Octanol/Water (log Po/w):  -1.06at 22 °C  Auto-ignition temperature:  > 400 °C  Decomposition temperature:  Not available  Viscosity, dynamic (mPa.s):  Explosive properties:  Not available  Oxidising properties:  Not available  Molecular Formula:  C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Vapour pressure (25°C):	0.000056 Pa
Bulk density (kg/m³):  Water solubility (g/l):  n-Octanol/Water (log Po/w):  Auto-ignition temperature:  Decomposition temperature:  Viscosity, dynamic (mPa.s):  Explosive properties:  Oxidising properties:  Mot available  Not available  Not available  Not available  Not available  Oxidising properties:  Not available  Molecular Formula:  C9H19NO4	Vapour density:	Not available
Water solubility (g/l):  n-Octanol/Water (log Po/w):  Auto-ignition temperature:  Decomposition temperature:  Viscosity, dynamic (mPa.s):  Explosive properties:  Oxidising properties:  Molecular Formula:  Not available  Possible  Not available  Not available  Not available  Not available	Density:	1.2 g/cm³ at 20 °C
n-Octanol/Water (log Po/w):  Auto-ignition temperature:  Decomposition temperature:  Viscosity, dynamic (mPa.s):  Explosive properties:  Oxidising properties:  Mot available  Not available  Not available  Not available  Oxidising properties:  Not available  Molecular Formula:  C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Bulk density (kg/m³):	Not available
Auto-ignition temperature: > 400 °C  Decomposition temperature: Not available  Viscosity, dynamic (mPa.s): Not available  Explosive properties: Not available  Oxidising properties: Not available  Molecular Formula: C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Water solubility (g/l):	> 509 g/L at 22 °C
Decomposition temperature:  Viscosity, dynamic (mPa.s):  Explosive properties:  Oxidising properties:  Mot available  Not available  Not available  Not available  C9H19NO4	n-Octanol/Water (log Po/w):	-1.06at 22 °C
Viscosity, dynamic (mPa.s):  Explosive properties:  Oxidising properties:  Molecular Formula:  Not available  Not available  C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Auto-ignition temperature:	> 400 °C
Explosive properties:  Oxidising properties:  Not available  Not available  C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Decomposition temperature:	Not available
Oxidising properties:  Not available  Molecular Formula:  C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Viscosity, dynamic (mPa.s):	Not available
Molecular Formula: C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>	Explosive properties:	Not available
	Oxidising properties:	Not available
Molecular Weight: 205.25	Molecular Formula:	C <sub>9</sub> H <sub>19</sub> NO <sub>4</sub>
<del>-</del>	Molecular Weight:	205.25

# 9.2. Other information:

Fat solubility(solvent- oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water( pKa):	11.65(22 °C)
Oxidation-reduction Potential:	Not available
Specific gravity:	Not available

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# 10 Stability and reactivity

# 10.1 Reactivity:

The substance is stable under normal storage and handling conditions.

### 10.2 Chemical stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

# 10.3 Possibility of hazardous reactions:

No dangerous reactions known.

# 10.4 Conditions to avoid:

Incompatible materials. Heat.

### 10.5 Incompatible materials:

Strong acids and strong bases, strong oxidizing agents.

# 10.6 Hazardous decomposition products:

Heating or fire can release toxic gas.

### 11 Toxicological information

# 11.1 Information on toxicological effects:

### Acute toxicity:

LD50(Oral, Rat):	> 10000 mg/kg bw
LD50(Dermal, Rat):	> 2000 mg/kg bw
LC50(Inhalation, Rat):	Not available
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified

# 12 Ecological information

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### 12.1 Toxicity:

Acu	te toxicity	Time	Species	Method	Evaluation	Remarks
LC50	> 1000 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	> 100 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	> 100 mg/L	72h	Algae	OECD 201	N/A	N/A

- 12.2 Persistence and degradability: Readily biodegradable
- 12.3 Bioaccumulative potential: Not available.
- 12.4 Mobility in soil: The product is soluble in water.
- 12.5 Results of PBT&vPvB assessment: The substance is not PBT / vPvB.
- 12.6 Other adverse effects: Not available.
- 13 Disposal considerations
- 13.1 Waste treatment methods:

The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

### 14 Transport information

	Land	Sea transport	Air transport
	transport(ADR/RID)	(IMDG)	(ICAO/IATA)
UN-Number	Not regulated	Not regulated	Not regulated
UN Propershipping name	Not regulated	Not regulated	Not regulated
Transport hazard Class	Not regulated	Not regulated	Not regulated
Packaging group	Not regulated	Not regulated	Not regulated
Environmental hazards	No	No	No
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according			
to Annex II of MARPOL	Not regulated	Not regulated	Not regulated
and the IBC Code			

### 15 Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

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Other National regulations: Not applicable

15.2 Chemical Safety Assessment has been carried out?

NO

Safety

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8

16 Other information

16.1 Indication of changes:

Not applicable

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation for rail International transportation of Dangerous goods

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
N/A	N/A	N/A

#### 16.5 Relevant H-statements (number and full text):

Not applicable.

16.6 Training instructions:

Not applicable.

#### 16.7 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.8 Notice to reader:

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