

# Material Safety Data Sheet

MSDS No.: MSDS#8015171E  
Product Name: SuperDissol Instant HEPES buffer

First Revision Date: 2021.01.13  
Last Revision Date: 2023.05.18 Version No.:1.0

## Section 1: Chemical Product & Company Identification

### Identification of the Substance or Mixture

**Product Code :** 8015171/8015172  
**Product Name :** SuperDissol Instant HEPES buffer

### Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

#### Identified uses

For research use only. Not applicable for diagnostic procedures.

#### Uses advised

Not for consumer use.

### Identification of the Company/Undertaking

Manufacturer: Shenzhen Dakewe Bio-engineering Co., Ltd.  
Address: Room 702-703, Building No.1, Shenzhen Biomedicine Innovations Industrial Park, No.14 Jinhui Road, Kengzi Street, Pingshan District, Shenzhen, China

**24-hour emergency response for hazardous articles [or hazardous goods] accidents. For spill, release, fire, exposure or accident, call Chemical Transportation Emergency Center (CHEMTREC).**

International: +1-703-741-5970 and +1-703-527-3887

China: 4001-204937

USA: 1-800-424-9300 and +1-703-527-3887

National/regional emergency number (if any)

CHEMTREC Hong Kong (Hong Kong) 800-968-793

CHEMTREC Singapore 800-101-2201 and +(65)-31581349

CHEMTREC Taiwan 0081-14-8954

## Section 2: Hazards Identification

### Australian SDS Statement

Not classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonised System (GHS).

### GHS Classification

#### Health hazards

Skin corrosion/irritation	Category 1
Severe eye injury/eye irritation	Category 2A
Sensitization (skin)	Category 1

#### Physical hazards

Not hazardous

#### Environmental hazards

Not hazardous

### Label Elements

#### Signal word

Warning

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## Hazard pictograms



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Proprietary Reagent CP (0.1 %)

## Hazard statements

H315 Causes skin irritation H319 Causes serious eye irritation  
H317 May cause an allergic skin reaction

## Precautionary statements Prevention

P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P280 Wear protective gloves/eye protection/face protection

## Response

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention  
P337+P313 If eye irritation persists: Get medical advice/ attention

## Storage

Preserved in sealed containers

## Disposal

Contents/containers must be disposed of according to local/regional/national/international regulations

## Other hazards

Not applicable

## Section 3: Composition/Information on Ingredients

Ingredient	CAS No	Common Name	EINECS No.	Concentration or Concentration Range (mass fraction, %)
Sodium dodecyl sulfate	151-21-3	Not applicable	205-788-1	2-6

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

## Section 4: First Aid Measures

### Description of first aid measures

**Skin contact** Rinse with plenty of water. If symptoms persist, consult a physician.

**Eye contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

**Ingestion** Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

**Inhalation** Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

**Note to Physician** Treat symptomatically.

Most important symptoms and effects, both acute and delayed

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Not applicable

## Indication of any immediate medical attention and special treatment

None

## Section 5: Fire-fighting Measures

### Extinguishing media

**Suitable extinguishing media** Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical powder.

**Unsuitable extinguishing media** No data available.

### Special hazards arising from the substance or mixture

Unknown

### Advice for firefighters

Wear self-contained breathing apparatus.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Always wear recommended personal protective equipment.

Use personal protective equipment.

See Section 8 for more details.

### Environmental precautions

Prevent the product from entering drains and do not let the material contaminate groundwater systems.

### Methods for containment and removal of spilled chemicals and disposal materials used

Soak up with an inert absorbent material (sand, silica gel, acid binder, universal binder, saw dust, etc.) Sweep and transfer with a shovel into an appropriate container for disposal. Thoroughly clean contaminated surfaces.

### Reference to other sections

See Sections 7, 8 and 13 for more details.

## Section 7: Handling and storage

### Precautions for safe handling

Use personal protective equipment as required. No special handling advice is necessary.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

### Specific end uses

For research use only.

## Section 8: Exposure controls/personal protection

### Control parameters

Chemical Name	Australia STEL	Australia	Australia – Skin Absorbers	Australia - OES - Peak
Sodium dodecyl sulfate 151-21-3	None	None	None	None

Chemical Name	New Zealand – Workplace Exposure Limits	New Zealand TWA	New Zealand STEL	New Zealand Ceiling Limits
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Sodium dodecyl sulfate 151-21-3	No data available	No data available	No data available	No data available
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Chemical Name	China OEL (MAC)	China-Skin Absorbers	Hong Kong OEL
Sodium dodecyl sulfate 151-21-3	None	None	None

Chemical Name	Korea OEL (CEILING)	Korea OEL (TWA)	Korea OEL (STEL)
Sodium dodecyl sulfate 151-21-3	None	None	None

Chemical Name	Taiwan OEL - TWA	Taiwan OEL (Skin notations, Carcinogens)	Taiwan OEL (STELs)	Taiwan OEL (Ceilings)
Sodium dodecyl sulfate 151-21-3	None		None	

Chemical Name	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Sodium dodecyl sulfate 151-21-3	None	None

**Engineering measures** Ensure adequate ventilation, especially in confined areas.

## Exposure Controls

### Personal protective equipment

<b>Respiratory protection</b>	In case of insufficient ventilation, wear respirators and components tested and approved under appropriate government standards.
<b>Hand protection</b>	Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.
<b>Eye protection</b>	Tight sealing safety goggles.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Control of environmental exposure</b>	No special environmental precautions required.

## Section 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	<b>Granular crystals</b>
<b>Odor</b>	<b>No data available</b>
<b>Molecular weight</b>	<b>No data available</b>
<b>pH</b>	<b>No data available</b>
<b>Melting point/melting range</b>	°C Mixture has not been tested °F Mixture has not been tested
<b>Boiling point/boiling range</b>	°C Mixture has not been tested °F Mixture has not been tested
<b>Flash point</b>	°C Mixture has not been tested °F Mixture has not been tested
<b>Autoignition temperature</b>	°C Mixture has not been tested °F Mixture has not been tested
<b>Decomposition temperature</b>	°C Mixture has not been tested °F Mixture has not been tested
<b>Evaporation rate</b>	No data available

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<b>Flammability (solid, gas)</b>	No data available
<b>Upper explosive limit</b>	No data available
<b>Lower explosive limit</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Relative density</b>	No data available
<b>Specific gravity</b>	No data available
<b>Solubility</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>Particle properties</b>	No data available

**Other information**  
No data available

## Section 10: Stability and Reactivity

<b>Reactivity</b>	Unknown
<b>Chemical stability</b>	Stable under normal conditions
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No hazardous reaction known under conditions of normal use
<b>Hazardous decomposition products</b>	No data available

## Section 11: Toxicological Information

### Information on toxicological effects

Chemical Name	Oral LD <sub>50</sub>	Dermal LD <sub>50</sub>	Inhalation LC <sub>50</sub>
Sodium dodecyl sulfate	1,288 mg/kg (rat)	50 mg/kg (rab)	>3900mg/m <sup>3</sup> (Rat)

### Main routes of exposure

<b>Irritation</b>	Conclusive but not sufficient for classification
<b>Corrosion</b>	Conclusive but not sufficient for classification
<b>Sensitization</b>	Conclusive but not sufficient for classification
<b>Specific target organ toxicity (STOT) – single exposure</b>	Conclusive but not sufficient for classification
<b>Specific target organ toxicity (STOT) – repeated exposure</b>	Conclusive but not sufficient for classification
<b>Carcinogenicity</b>	Conclusive but not sufficient for classification
<b>Mutagenicity</b>	Conclusive but not sufficient for classification
<b>Reproductive toxicity</b>	Conclusive but not sufficient for classification
<b>Inhalation hazard</b>	Conclusive but not sufficient for classification

## Section 12: Ecological Information

### Toxicity

Contain no substances known to be hazardous to the environment or not degradable.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Sodium dodecyl sulfate	<i>Seudokirchneriella subcapitata</i> EC <sub>50</sub> = 3.59- 15.6 mg/L (96 h)	Daphnia magna EC <sub>50</sub> = 1.8 mg/L (48 h)	No data available	No data available	logPow1.6

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	<i>Pseudokirchneriella subcapitata</i> EC <sub>50</sub> = 117 mg/L (96 h) <i>Desmodesmus subspicatus</i> EC <sub>50</sub> = 30-100 mg/L (96 h) <i>Desmodesmus subspicatus</i> EC <sub>50</sub> = 53 mg/L (72 h)				
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**Mobility in soil** No data available.

**Persistence and degradability** No data available.

**Bioaccumulative potential** No data available.

## Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other adverse effects** No data available.

## Section 13: Disposal considerations

### Waste disposal methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of according to approved disposal techniques. Disposal of this product, its solutions or by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## Section 14: Transport information

### IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

<b>UN number</b>	Not applicable
<b>UN proper shipping name</b>	Not applicable
<b>Transport hazard classes</b>	Not applicable
<b>Packaging group</b>	Not applicable

### Environmental hazards

Not applicable

### Special precautions for user

Not applicable

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## Section 15: Regulatory Information

### International Inventory

Chemical Name	US TSCA	Canada (DSL)	NDSL	PICCS (Philippines)
Sodium dodecyl sulfate	Listed	Listed	-	Listed

Chemical Name	ENCS (Japan)	IECSC - Inventory of Existing Chemical Substances Produced or Imported in China	South Korea (KECL)	AICS (Australia)
Sodium dodecyl sulfate	Listed	Listed	Listed	Listed

Chemical Name	NZIoC - New Zealand Inventory of Chemicals	EINECS (EU)	ELINCS (European List of Notified Chemical Substances)
Sodium dodecyl sulfate	Listed	Listed	-

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## UN - Chemical Weapons Convention (CWC)

Not applicable

## **South Korea**

Chemical Name	Industrial Safety and Health Act (ISHA)	Chemicals Control Act (CCA)	Wastes Control Act
Sodium dodecyl sulfate	Not applicable	Not applicable	Not applicable

## **Singapore**

Chemical Name	Singapore - Poisons List
Sodium dodecyl sulfate	Not listed

## **Taiwan (China)**

Chemical Name	Toxic Chemical Substances Control Act - Classification and Control Levels	Toxic Chemical Substances Control Act - Threshold Regulated Quantities	Hazard Prevention Standard for Specified Chemical Substances
Sodium dodecyl sulfate	Not listed	Not listed	Not listed

## **China**

Chemical Name	China - Catalogue of Occupational Hazard Factors	China - Dangerous Goods List	China - Catalog of Hypertoxic Chemicals	China - List of Dangerous Chemicals for Priority Management
Sodium dodecyl sulfate	Not listed	Not listed	Not listed	Not listed

## **Section 16: Other Information**

Reason for revision Update (M) SDS sections.  
Revision number 1  
Revision date 2022-7-21

**For research use only. Not applicable for diagnostic procedures.**

## References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

## Abbreviations and Acronyms

TWA - Time-weighted average  
OELs - Occupational exposure limits  
STEL - Short-term exposure limit  
DSL/NDSL - Canada Domestic Substances List/Non-domestic Substance List  
KECL - Korea Existing Chemicals List  
ENCS - Japanese Existing and New Chemical Substances  
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China  
PICCS - Philippine Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances  
NZIoC - New Zealand Inventory of Chemicals  
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/European List of Notified Chemical Substances  
TSCA - Chemical Substance Inventory, Section 8 (b) of Toxic Substance Control Act  
CEPA - Canadian Environmental Protection Act  
EPA - Environmental Protection Agency  
OSHA - Occupational Safety and Health Administration, United States Department of Labor  
IATA - International Air Transport Association  
DOT - Department of Transportation

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**IMDG - International Maritime Dangerous Goods**

**ACGIH - American Conference of Governmental Industrial Hygienists**

**NIOSH - National Institute for Occupational Safety and Health**

**AIHA - American Industrial Hygiene Association**

**HMIS - Hazardous Materials Information System, Department of Defense**

**NTP - National Toxicology Program**

**IARC - International Agency for Research on Cancer**

"The information contained here has been compiled through diligent searches and/or investigations. The recommendations given should be used with caution based on professional judgment. The information given should not be considered all-inclusive and should be interpreted as guidance only. All materials and mixtures may present unknown hazards and should be used with caution. Our company assumes no responsibility for damages or losses resulting from handling or exposure to the product described herein, since we have no control over the actual methods, quantities or conditions of use.

**The information in this SDS does not constitute any express or implied warranty, including any implied warranty of merchantability or fitness for a particular purpose."**

**End of Safety Data Sheet**