

Material Safety Data Sheet

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

First Revision Date: 2021.01.13
Last Revision Date: 2024.11.29 Version No.:2.0

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

DAKEWE

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Hazard pictograms



Hazard pictographs

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 (CO₂). 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

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

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

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

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

Other information

No data available

Section 10: Stability and Reactivity

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

Section 11: Toxicological Information

Information on toxicological effects

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

Main routes of exposure

Irritation	Conclusive but not sufficient for classification
Corrosion	Conclusive but not sufficient for classification
Sensitization	Conclusive but not sufficient for classification
Specific target organ toxicity (STOT) – single exposure	Conclusive but not sufficient for classification
Specific target organ toxicity (STOT) – repeated exposure	Conclusive but not sufficient for classification
Carcinogenicity	Conclusive but not sufficient for classification
Mutagenicity	Conclusive but not sufficient for classification
Reproductive toxicity	Conclusive but not sufficient for classification
Inhalation hazard	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 ₅₀ = 3.59- 15.6 mg/L (96 h)	<i>Daphnia magna</i> EC ₅₀ = 1.8 mg/L (48 h)	No data available	No data available	logPow1.6

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	<i>Pseudokirchneriella subcapitata</i> EC ₅₀ = 117 mg/L (96 h) <i>Desmodesmus subspicatus</i> EC ₅₀ = 30-100 mg/L (96 h) <i>Desmodesmus subspicatus</i> EC ₅₀ = 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

UN number Not applicable**UN proper shipping name** Not applicable**Transport hazard classes** Not applicable**Packaging group** 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

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/NDL - 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
IMDG - International Maritime Dangerous Goods

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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