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Section 1: Chemical Product & Company Identification

Identification of the Substance or Mixture

Product Code: 8011081/8011082

Product Name: ColorBand Prestained Protein Marker Low Range 2.7 kDa-40 kDa

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

Emergency Overview

| Physical state | liquid |
|----------------|---------------|
| Overview | Not Hazardous |

CHS Classification

Not Hazardous

Label elements

Signal Word

None

Hazard pictograms

None

Hazard Statements



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Not Hazardous

Precautionary Statements

Prevention

Not Applicable

Response

Not Applicable

Storage

Not Applicable

Disposal

Not Applicable

Physical and chemical hazards

Hazardous reaction has not been reported.

Health hazards

Not Applicable

Environmental hazards

Not Applicable

Other hazards

Not Applicable

Section 3: Composition/information on ingredients

| Chemical Name | CAS No | EINECS-No. | Weight-% |
|-----------------------|----------|------------|----------|
| Glycerin | 56-81-5 | 200-289-5 | 40-70 |
| Sodium lauryl sulfate | 151-21-3 | 205-788-1 | 1-5 |

We recommend handling all chemicals with caution.

Section 4: First aid measures

Description of first aid measures

Skin contact

Rinse skin with water. Immediate medical attention is not required.

Eye contact

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

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.

Notes to Physician

Treat symptomatically.

Most important symptoms and effects, both acute and delayed

Not Applicable

Indication of any immediate medical attention and special treatment needed

None.



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Section 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable extinguishing media

No information available.

Special hazards arising from the substance or mixture

Not known.

Advice for firefighters

Standard procedure for chemical fires.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See section 8 for more information.

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

Section 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

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

Storage Conditions

Store at -25 °C~-15 °C.

Specific end use(s)

For research use only. Not for use in diagnostic procedures

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits

Contains no substances with occupational exposure limit values.

| Chemical Name | China OEL (MAC) | China - Skin Absorbers |
|-----------------------------------|-----------------|------------------------|
| Glycerin 56-81-5 | None | None |
| Sodium lauryl sulfate 151-21-3 | None | None |

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment



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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

Environmental exposure controls

No special environmental precautions required

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state liquid
Odour No data
Odour Threshold No data
pH No data
Molting point / molting range %C No. d.

Melting point / melting range°C No data°F No dataBoiling point / boiling range°C No data°F No dataFlash point°C No data°F No dataAutoignition Temperature°C No data°F No dataDecomposition temperature°C No data°F No data

Evaporation rate No data No data Flammability (solid, gas) Upper explosion limit No data Lower explosion limit No data Vapour Pressure No data Relative density No data Specific gravity No data No data Solubility Partition coefficient: No data

n-octanol/water

Viscosity No data Explosive properties No data Oxidising properties No data

Other information No data available

SECTION 10: Stability and reactivity

Reactivity

None known.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reaction has not been reported.

Conditions to avoid

No information available.

Incompatible materials

No dangerous reaction known under conditions of normal use.



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Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

Information on toxicological effects

There is no evidence available indicating acute toxicity.

| Chemical Name | Oral LD50 Dermal LD50 | | Inhalation LC50 | |
|-----------------------|-----------------------|---------------------|------------------|--|
| Glycerin | = 12600 mg/kg Oral | > 10 g/kg(Rabbit) | >2.75mg/L(Rat) | |
| Sodium lauryl sulfate | = 1288 mg/kg (Rat) | = 200 mg/kg(Rabbit) | >3900mg/m3 (Rat) | |

Principal Routes of Exposure

Skin corrosion/irritation

Data are conclusive but insufficient for classification

Serious eye damage/irritation

Data are conclusive but insufficient for classification

Respiratory or skin sensitisation

Data are conclusive but insufficient for classification

Specific target organ toxicity (STOT)-singleexposure

Data are conclusive but insufficient for classification

Specific target organ toxicity (STOT)-repeatedexposure

Data are conclusive but insufficient for classification

Carcinogenicity

Data are conclusive but insufficient for classification

Germ cell mutagenicity

Data are conclusive but insufficient for classification

Reproductive Toxicity

Data are conclusive but insufficient for classification

Aspiration hazard

Data are conclusive but insufficient for classification

SECTION 12: Ecological information

Toxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

| Chemical Name | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish | Microtox Data | log Pow |
|--------------------------|---|---|----------------------|----------------------|-----------------|
| Glycerin | No data available | No data available | No data available | No data available | logPow- 1.75 |
| Sodium lauryl sulfate | Pseudokirchneriella Subcapitata EC503.59 - 15.6 mg/L (96 h) Pseudokirchneriella subcapitata EC50=117 mg/L (96 h) Desmodesmus subspicatus EC5030 -100 mg/L (96 h) Desmodesmus subspicatus EC50=53 mg/L (72 h) | Daphnia magna EC50=1.8 mg/L (48 h) | No data available | No data available | logPow1.6 |



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Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Results of PBT and vPvB assessment

No information available.

Other adverse effects

Contains a known or suspected endocrine disruptor.

SECTION 13: Disposal considerations

Waste treatment 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 in according to approved disposal technique. Disposal of this product, its solutions or of any 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 or ID number

Not Applicable

UN proper shipping name

Not Applicable

Transport hazard class(es)

Not Applicable

Packing group

Not Applicable

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

Maritime transport in bulk according to IMO instruments

Not Applicable.

SECTION 15: Regulatory information

International Inventories

Not Applicable.

| Chemical Name | US TSCA | Canada (DSL) | NDSL | PICCS (Philippines) |
|-----------------------|---------|--------------|------|---------------------|
| Glycerin | Listed | Listed | • | Listed |
| Sodium lauryl sulfate | Listed | Listed | - | Listed |

| Chemical Name | ENCS (Japan) | IECSC - China Inventory of Existing Chemical Substances | South Korea (KECL) | AICS (Australia) |
|-----------------------|--------------|---|--------------------|------------------|
| Glycerin | Listed | Listed | Listed | Listed |
| Sodium lauryl sulfate | Listed | Listed | Listed | Listed |

| Chemical Name | NZIoC - New Zealand Inventory of Chemicals | EINECS (European Union) | ELINCS (European List of Notified Chemical Substances) |
|---------------|---|-------------------------|---|
|---------------|---|-------------------------|---|



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| Glycerin | Listed | Listed | - |
|-----------------------|--------|--------|---|
| Sodium lauryl sulfate | Listed | Listed | - |

UN (United Nations) - Chemical Weapons Convention (CWC)

Not Applicable

Korea

Occupational Safety and Health Act

| Chemical Name | ISHA - Substances to be controlled - Metals | ISHA - Substances to be controlled - Organic Substances | ISHA - Substances to be controlled - Acids and bases | ISHA - Substances to be controlled - Gas-phase substances |
|-----------------------|---|---|--|---|
| Glycerin | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| Chemical Name | ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying | ISHA - Harmful Substances Requiring Permission | Special management materials |
|-----------------------|---|---|--|
| Glycerin | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | When the ratio is 0.3 %(volume) or more |

| Chemical Name | Harmful agents subject to work environment monitoring - Organic compounds | Harmful agents subject to work environment monitoring - Metals | Harmful agents subject to work environment monitoring - Acids and alkalis | Harmful agents subject to work environment monitoring - Gas-phase substances | Harmful agents subject to work environment monitoring - Dusts |
|-----------------------|---|--|---|--|---|
| Glycerin | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| Chemical Name | Harmful agents subject to workers requiring health examination - Organic compounds | Harmful agents subject to workers requiring health examination - Metals | Harmful agents subject to workers requiring health examination - Acids and alkalis | Harmful agents subject to workers requiring health examination - Gas-phase substances | Harmful agents subject to workers requiring health examination - Dusts |
|--------------------------|---|---|---|---|--|
| Glycerin | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| Chemical Name | Korea OEL (CEILING) | Korea OEL (TWA) | Korea OEL (STEL) | Korea OEL (Skin Notations) |
|-----------------------|---------------------|-----------------|------------------|-------------------------------|
| Glycerin | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

| Chemical Name | Korea OEL (Carcinogens) | Korea OEL (Germ Cell Mutagenicity) | Korea OEL (Reproductive Toxicity) | Korea PEL (STELs) | Korea PEL (TWAs) |
|-----------------------|----------------------------|---------------------------------------|---|-------------------|------------------|
| Glycerin | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Applicable | Not Applicable | Not Applicable | Not Applicable |



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| Chemical Name | ISHA - Harmful or Dangerous Substances Subject to Submission of Process Safety Reports - Storage | ISHA - Harmful or Dangerous Substances Subject to Submission of Process Safety Reports - Manufacturing or Handling | |
|-----------------------|--|--|--|
| Glycerin | Not Applicable | Not Applicable | |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | |

Chemicals Control Act

Not Applicable

| Chemical Name | Toxic substance | Prohibited substance | Restricted substance |
|-----------------------|-----------------|----------------------|----------------------|
| Glycerin | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | Not Applicable |

| Chemical Name | Threshold Values (%) | Quantity limit for manufacture/use | Quantity limit for custody/storage |
|-----------------------|----------------------|------------------------------------|---------------------------------------|
| Glycerin | Not Applicable | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | Not Applicable |

| Chemical Name | Pollutant Release and Transfer Registers (PRTR) - Group I | Pollutant Release and Transfer Registers (PRTR) - Group II |
|-----------------------|--|---|
| Glycerin | Not Applicable | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable |

Act on Registration, Evaluation, etc. of Chemicals (K-REACH)

Not Applicable

| Chemical Name | Ministry of Environment - CMR risk | Ministry of Environment - Critically Controlled Substance | Existing substances subject to registration Substances | Exempted from Registration or Notification - Annex 1 | Substances Exempted from Registration or Notification - Annex 2 |
|-----------------------|---|---|--|---|---|
| Glycerin | Not Applicable | Not Applicable | Not Applicable | Index No. 4-d | Not Applicable |
| Sodium lauryl sulfate | Not Applicable | Not Applicable | Not Applicable | Not Applicable | Not Applicable |

Safety Control of Dangerous Substances Act

Not Applicable

| Chemical Name | Safety Control of Dangerous Substances Act | |
|-----------------------|--|--|
| Glycerin | Not Applicable | |
| Sodium lauryl sulfate | Not Applicable | |

Wastes Control Act

Not Applicable

| Chemical Name | Wastes Control Act |
|-----------------------|--------------------|
| Glycerin | Not Applicable |
| Sodium lauryl sulfate | Not Applicable |

Singapore



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Not Applicable

| Chemical Name | Singapore - Poisons List |
|-----------------------|--------------------------|
| Glycerin | Not Listed |
| Sodium lauryl sulfate | Not Listed |

China

Not Applicable

| 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 |
|-----------------------|--|---------------------------------|--|---|
| Glycerin | Not Listed | Not Listed | Not Listed | Not Listed |
| Sodium lauryl sulfate | Not Listed | Not Listed | Not Listed | Not Listed |

SECTION 16: Other information

For research use only. Not for use in diagnostic procedures.

References

- *ECHA:http://echa.europa.eu/
- TOXNET: http://toxnet.nlm.nih.gov/
- •eChemPortal:http://www.echemportal.org/
- LOLIdatabase: https://www.chemadvisor.com/loli-database

Abbreviations and acronyms

TWA - Time-Weighted Average

OELs - Occupational Exposure Limits

STEL - Short Term Exposure Limit

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

CEPA - Canadian Environmental Protection Act

EPA - Environmental Protection Agency

OSHA - Occupational Safety and Health Administration of the US Department of Labour

IATA - International Air Transport Association

DOT - Department of Transportation

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 - Department of Defense Hazardous Materials Information System

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution.

Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.



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End of Safety Data Sheet



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