

## SAFETY DATA SHEET

### SECTION 1. Identification of the substance/mixture and of the company

1. Identification of the substance or mixture

Product No: 12642-A

Product Name: 1×dsDNA HS Working Solution

2. Recommended use of the chemical and restrictions on use

Relevant identified uses: For research use only.

Uses advised against: Not used for diagnostic procedures.

3. Details of the supplier of the safety data sheet

Yeasen Biotechnology (Shanghai) Co., Ltd.

Tianxiong Road, Pudong New Area Shanghai International Medical Zone, Shanghai, China.

Hotline: +86-400-6111-883.

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### SECTION 2. Hazard Identification

1. GHS (Globally Harmonized System) Classification.

2. Signal word: None.

3. Health hazards: Not classified.

4. Physical hazards: Not classified.

5. Hazard statements: Not applicable.

6. Precautionary Statements: Not applicable.

7. Principle Routes of Exposure/Potential Health effects

Eyes: May cause eye irritation in susceptible individuals.

Skin: May cause skin irritation in susceptible individuals.

Inhalation: May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

8. Specific effects

Carcinogenic effects: None.

Mutagenic effects: None.

Reproductive toxicity: None.

Sensitization: None.

### SECTION 3. Composition/information on ingredients

Component	CAS No	Weight-%
Dimethyl sulfoxide	67-68-5	95-100

\* We recommend handling all chemicals with caution.

### SECTION 4. First aid measures

1. Skin contact: Rinse cautiously with water for several minutes. No need urgent medical attention.

2. Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if available and accessible.
3. Ingestion: No significant ingestion hazard should be considered under conditions of normal use. Seek medical attention if feeling unwell.
4. Inhalation: No significant inhalation hazard should be considered under conditions of normal use. Consult a physician if necessary.
5. Most important symptoms and effects, both acute and delayed: Not applicable.
6. Instructions for physicians: symptomatic treatment.

### SECTION 5. Fire-Fighting measures

1. Suitable extinguishing media: Carbon dioxide (CO<sub>2</sub>), foam, dry chemical.
2. Unsuitable extinguishing media: No information available.
3. Special hazards arising from the substance or mixture: No information available.
4. Protective equipment and precautions for firefighters: Standard procedure for chemical fires.

### SECTION 6. Accidental release measures

1. Personal precautions: Always wear recommended Personal Protective Equipment. Use personal protection equipment.
2. Methods for cleaning up: Absorb with inert absorbent material.
3. Environmental precautions: No special environmental precautions required. See Section 12 for more information.

### SECTION 7. Handling and storage

1. Handling: Always wear recommended Personal Protective Equipment. Wear personal protective equipment.
2. Storage: Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.
3. Specific end use (s): **For research use only.**

### SECTION 8. Exposure controls/personal protection

1. Control parameters

Chemical Name	China OEL (MAC)	China - Skin Absorbers	Hong Kong OEL
Dimethyl sulfoxide	None	None	None

Engineering Measures: Ensure adequate ventilation, especially in confined areas.

2. 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.

Environmental exposure controls: No special environmental precautions required.

**SECTION 9. Physical and chemical properties**

Physical and chemical Properties	Information	Physical and chemical Properties	Information
Appearance	liquid	Upper explosion limit	61% - 64%
Odour	No Data	Lower explosion limit	2.4% - 2.8%
Odour Threshold	No Data	Vapour Pressure	No Data
Molecular Weight	No Data	Vapour density	No Data
pH	6-8	Relative density	No Data
Melting point / melting range	°C 18 – 19 °F 64.4 - 66.2	Specific gravity	No Data
Boiling point / boiling range	°C 188 – 190 °F 370 - 374	Solubility	No Data
Flash point	°C 87 – 89 °F 188.6 - 192.2	Partition coefficient: n-octanol/water	No Data
Autoignition Temperature	°C 214 – 216 °F 417.2 - 420.8	Viscosity	No Data

**SECTION 10. Stability and reactivity**

1. Chemical stability: Stable under normal conditions.
2. Reactivity: None known.
3. Possibility of hazardous reactions: Hazardous reaction has not been reported.
4. Conditions to avoid: No information available.
5. Incompatible materials: Strong acids. Strong oxidants.
6. Hazardous decomposition products: No data available.

**SECTION 11: Toxicological information**

1. Information on toxicological effects

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl sulfoxide	14500 mg/kg Oral LD50	>40000 mg/kg bw	>5000 mg/l

2. Principal Routes of Exposure

Acute toxicity: Data are conclusive but insufficient for classification.

Skin corrosion/irritation: Mild skin irritant Mild eye irritation Components of the product may be absorbed into the body through the skin.

Serious eye damage/irritation: Data are conclusive but insufficient for classification.

Respiratory or skin sensitization: Data are conclusive but insufficient for classification.

STOT – single exposure: Data are conclusive but insufficient for classification.

STOT– repeated exposure: 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**

1. Ecotoxicity: 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
Dimethyl sulfoxide	Skeletonema costatum EC5012350 - 25500 mg/L (96 h)	Daphnia species EC50=7000 mg/L (24 h)	No data available	No data available	logPow-2.03

- Mobility in soil: No information available.
- Persistence and degradability: Inherently biodegradable.
- Bio accumulative potential: Material does not bioaccumulate.
- 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 information available.

### SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

### SECTION 14: Transport information

- IATA / ADR / DOT-US / IMDG  
Not classified as dangerous in the meaning of transport regulations  
UN 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
- Transport in bulk according to Annex II of MARPOL and the IBC Code: Not Applicable

### SECTION 15: Regulatory information

- International Inventories: No information available.
- China: No information available.

### SECTION 16: Other information

- Indication of changes: GHS aligned.
- Training instructions: Use as instructed.
- Further information: The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. This SDS has been prepared for use with this product only.
- Notice to readers: The information and recommendations in this safety data sheet should be regarded as a supplement to existing regulations and relevant information that should be known before. It is the responsibility of the users to determine the applicability of this information and the suitability of the material or product for any particular purpose. The health and safety of employees while using this product should be taken responsibly by the employer.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**End of Safety Date Sheet**