

## SAFETY DATA SHEET

Date Revised: Sep 7, 2021

### SECTION 1: Product and Company Identification

**Product Name:** Viability/Cytotoxicity Assay Kit for Bacteria Cells (NucGreen)

**Catalog Number:** L6060S,L6060L

**Manufacturer/Supplier:**

UElandy (Suzhou) Co., Ltd.

Room 302-1, Building 1, No.18 Chunyao Road, Caohu Industrial Park, Xiangcheng District, Suzhou, P.R. China

Phone: 86-512-69571710, mailbox:service@uelandy.com

Web: <http://www.uelandy.com>

### SECTION 2: Hazards identification

**Classification according to Regulation (EC) No 1272/2008[CLP]**

None

**Classification according to Directive 1999/45/EC**

None

**Labeling according to Regulation (EC) No 1272/2008[CLP]**

**Hazard pictogram**

None

**Signal word** None

**Hazard statements** None

**Precautionary statements** None

**HMIS Classification**

Health hazard: 0

Flammability: 2

Physical hazards: 0

**NFPA Rating**

Health hazard: 0

Fire: 2

Reactivity Hazard: 0

### SECTION 3: Composition/information on ingredients

| Name | CAS No. | EC No.    | Index No. | Weight % | Classification according to regulation (EC)No1278/2008 |
|------|---------|-----------|-----------|----------|--|
| DMSO | 67-68-5 | 200-664-3 | --        | 96-100   | NA   |

### SECTION 4: First aid measures

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

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If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

## In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Flush eyes with water as a precaution.

## If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## SECTION 5: Firefighting measures

### Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

### Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental release measures

### Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and cleaning up

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

## SECTION 7: Handling and storage

### Precautions for safe handling

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store at -20°C.

## SECTION 8: Exposure controls/personal protection

### Components with workplace control parameters

Substance Dimethylsulfoxide

CAS no. 67-68-5

| country                 | Austria              | Belgium | Denmark              | European Union | France | Germany              |
|-------------------------|----------------------|---------|----------------------|----------------|--------|----------------------|
| Limit value, 8hours     | 160mg/m <sup>3</sup> | -       | 160mg/m <sup>3</sup> | -              | -      | 160mg/m <sup>3</sup> |
| Limit value, short term | -                    | -       | 320mg/m <sup>3</sup> | -              | -      | 320mg/m <sup>3</sup> |

| country                 | Hungary | Italy | Poland | Spain | Sweden               | Netherlands | United Kingdom |
|-------------------------|---------|-------|--------|-------|----------------------|-------------|----------------|
| Limit value, 8hours     | -       | -     | -      | -     | 160mg/m <sup>3</sup> | -           | -              |
| Limit value, short term | -       | -     | -      | -     | 500mg/m <sup>3</sup> | -           | -              |

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| country                 | United Kingdom | USA-NIOSH | USA-OSHA | Australia | Canada | Japan | South Korea |
|-------------------------|----------------|-----------|----------|-----------|--------|-------|-------------|
| Limit value,8hours      | -              | -         | -        | -         | -      | -     | -           |
| Limit value, short term | -              | -         | -        | -         | -      | -     | -           |

## Personal protective equipment

### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## SECTION 9: Physical and chemical properties

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Chemical Name                         | Calcein AM (4 mM in anhydrous DMSO) |
| Appearance                            | Liquid                              |
| Odor                                  | No data available                   |
| Odor threshold                        | No data available                   |
| pH                                    | No data available                   |
| Melting point/freezing point          | No data available                   |
| Boiling point                         | No data available                   |
| Flash point                           | No data available                   |
| Evaporate rate                        | No data available                   |
| Flammability                          | No data available                   |
| Explosive limits                      | No data available                   |
| Vapor pressure                        | No data available                   |
| Vapor density                         | No data available                   |
| Relative density                      | No data available                   |
| Solubility                            | Water soluble                       |
| Partition coefficient:n-octanol/water | No data available                   |
| Auto-ignition temperature             | No data available                   |
| Decomposition temperature             | No data available                   |
| Viscosity                             | No data available                   |
| Explosive properties                  | No data available                   |
| Oxidizing properties                  | No data available                   |

## SECTION 10: Stability and reactivity

### Chemical stability

Stable under recommended storage conditions.

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## **Possibility of hazardous reactions**

No data available

## **Conditions to avoid**

No data available

## **Materials to avoid**

Strong acids. Strong oxidizing agents

## **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

## **SECTION 11: Toxicological information**

### **Acute toxicity DMSO**

**Oral LD50** rat - 14,500 mg/kg

**Inhalation LC50** Inhalation - rat - 4 h - 40250 ppm

**Dermal LD50** rabbit - > 5,000 mg/kg

**Other information on acute toxicity** no data available

**Skin corrosion/irritation** no data available

**Serious eye damage/eye irritation** no data available

**Respiratory or skin sensitization** no data available

**Germ cell mutagenicity** Salmonella typhimurium assay (Ames test): negative (+/- activation),  
DMSO is used as a neutral solvent in the Ames mutagen test

### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity** Not considered to be directly embryotoxic and has been shown to be a successful cryoprotectant for mammalian semen and embryos

### **Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

### **Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

### **Aspiration hazard**

no data available

### **Potential health effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

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## Additional Information

RTECS: PV6210000 (DMSO)

## SECTION 12: Ecological information

**Toxicity DMSO** The LC50(96hrs) for ten species of fish range from 32500 to 43000ppm

**Persistence and degradability** no information available

**Biodegradation** no information available

**Mobility in soil** no information available

**Results of PBT and vPvB assessment** no information available

**Other adverse effects** no information available

**Additional information** no information available

## SECTION 13: Disposal considerations

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

## SECTION 14: Transport information

**IATA, IMDG, DOT (US)** not dangerous good during transportation

UN number none

UN proper shipping name none

Transport hazard class none

Packing group none

Environmental hazards none

Special precaution for user none

## SECTION 15: Regulatory information

### US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed

SARA 302: No chemicals were found.

SARA 313: No chemicals were found.

SARA 311/312 Hazards : No chemicals were found.

## SECTION 16: Other information

Reason for revision SDS sections updated

Version no. 1

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

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. UElandy (Suzhou) shall not be held liable for any damage resulting from handling or contact with the above product.

## SAFETY DATA SHEET

Date Revised: Sep 7, 2021

### SECTION 1: Product and Company Identification

**Product Name:** Viability/Cytotoxicity Assay Kit for Bacteria Cells (EthD-III)

**Catalog Number:** L6060S,L6060L

**Manufacturer/Supplier:**

UElandy (Suzhou) Co., Ltd.

Room 302-1, Building 1, No.18 Chunyao Road, Caohu Industrial Park, Xiangcheng District, Suzhou, P.R. China

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### SECTION 2: Hazards identification

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None

**Classification according to Directive 1999/45/EC**

None

**Labeling according to Regulation (EC) No 1272/2008[CLP]**

**Hazard pictogram**

None

**Signal word** None

**Hazard statements** None

**Precautionary statements** None

**HMIS Classification**

Health hazard: 0

Flammability: 2

Physical hazards: 0

**NFPA Rating**

Health hazard: 0

Fire: 2

Reactivity Hazard: 0

### SECTION 3: Composition/information on ingredients

| Name | CAS No. | EC No.    | Index No. | Weight % | Classification according to regulation (EC)No1278/2008 |
|------|---------|-----------|-----------|----------|--|
| DMSO | 67-68-5 | 200-664-3 | --        | 25%      | NA   |

### SECTION 4: First aid measures

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

# US EVERBRIGHT

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

## In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Flush eyes with water as a precaution.

## If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## SECTION 5: Firefighting measures

### Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

### Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental release measures

### Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and cleaning up

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

## SECTION 7: Handling and storage

### Precautions for safe handling

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store at -20°C.

## SECTION 8: Exposure controls/personal protection

### Components with workplace control parameters

Substance Dimethylsulfoxide

CAS no. 67-68-5

| country                 | Austria              | Belgium | Denmark              | European Union | France | Germany              |
|-------------------------|----------------------|---------|----------------------|----------------|--------|----------------------|
| Limit value, 8hours     | 160mg/m <sup>3</sup> | -       | 160mg/m <sup>3</sup> | -              | -      | 160mg/m <sup>3</sup> |
| Limit value, short term | -                    | -       | 320mg/m <sup>3</sup> | -              | -      | 320mg/m <sup>3</sup> |

| country                 | Hungary | Italy | Poland | Spain | Sweden               | Netherlands | United Kingdom |
|-------------------------|---------|-------|--------|-------|----------------------|-------------|----------------|
| Limit value, 8hours     | -       | -     | -      | -     | 160mg/m <sup>3</sup> | -           | -              |
| Limit value, short term | -       | -     | -      | -     | 500mg/m <sup>3</sup> | -           | -              |

# US EVERBRIGHT

| country                 | United Kingdom | USA-NIOSH | USA-OSHA | Australia | Canada | Japan | South Korea |
|-------------------------|----------------|-----------|----------|-----------|--------|-------|-------------|
| Limit value,8hours      | -              | -         | -        | -         | -      | -     | -           |
| Limit value, short term | -              | -         | -        | -         | -      | -     | -           |

## Personal protective equipment

### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## SECTION 9: Physical and chemical properties

|                                       |   |
|---------------------------------------|---|
| Chemical Name                         | Ethidium homodimer-1(EthD-I)(2 mM in DMSO/H2O 1:4(v/v)) |
| Appearance                            | Liquid  |
| Odor                                  | No data available                                       |
| Odor threshold                        | No data available                                       |
| pH                                    | No data available                                       |
| Melting point/freezing point          | No data available                                       |
| Boiling point                         | No data available                                       |
| Flash point                           | No data available                                       |
| Evaporate rate                        | No data available                                       |
| Flammability                          | No data available                                       |
| Explosive limits                      | No data available                                       |
| Vapor pressure                        | No data available                                       |
| Vapor density                         | No data available                                       |
| Relative density                      | No data available                                       |
| Solubility                            | Water soluble   |
| Partition coefficient:n-octanol/water | No data available                                       |
| Auto-ignition temperature             | No data available                                       |
| Decomposition temperature             | No data available                                       |
| Viscosity                             | No data available                                       |
| Explosive properties                  | No data available                                       |
| Oxidizing properties                  | No data available                                       |

## SECTION 10: Stability and reactivity

### Chemical stability

Stable under recommended storage conditions.



**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

Heat, flames and sparks.

**Materials to avoid**

No data available

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

## SECTION 11: Toxicological information

**Acute toxicity DMSO**

**Oral LD50** rat - 14,500 mg/kg

**Inhalation LC50** Inhalation - rat - 4 h - 40250 ppm

**Dermal LD50** rabbit - > 5,000 mg/kg

**Other information on acute toxicity** no data available

**Skin corrosion/irritation** no data available

**Serious eye damage/eye irritation** no data available

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**Germ cell mutagenicity** Salmonella typhimurium assay (Ames test): negative (+/- activation),  
DMSO is used as a neutral solvent in the Ames mutagen test

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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**Reproductive toxicity** Not considered to be directly embryotoxic and has been shown to be a successful cryoprotectant for mammalian semen and embryos

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

# US EVERBRIGHT

## Additional Information

RTECS: PV6210000 (DMSO)

## SECTION 12: Ecological information

**Toxicity DMSO** The LC50(96hrs) for ten species of fish range from 32500 to 43000ppm

**Persistence and degradability** no information available

**Biodegradation** no information available

**Mobility in soil** no information available

**Results of PBT and vPvB assessment** no information available

**Other adverse effects** no information available

**Additional information** no information available

## SECTION 13: Disposal considerations

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**IATA, IMDG, DOT (US)** not dangerous good during transportation

UN number none

UN proper shipping name none

Transport hazard class none

Packing group none

Environmental hazards none

Special precaution for user none

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SARA 311/312 Hazards : No chemicals were found.

## SECTION 16: Other information

Reason for revision SDS sections updated

Version no. 1

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