<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>L2015</td>
<td>Single-use HB101 Competent Cells</td>
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Components:

| L201         | HB101 Competent Cells, High Efficiency |
1 Identification

Product identifier
Trade name: HB101 Competent Cells, High Efficiency

Article number: L201
Application of the substance / the mixture: For Laboratory Use

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Information department:
SDS author: ChemicalRegulatory@promega.com
Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-800-356-9526 or (608)-274-4330

Emergency telephone number:
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture
The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements
GHS label elements: Not applicable
Hazard pictograms: Not applicable
Signal word: Not applicable
Hazard statements: Not applicable
Classification system:
NFPA ratings (scale 0 - 4)
Health = 0
Fire = 1
Reactivity = 0
HMIS-ratings (scale 0 - 4)
Health = 0
Fire = 1
Reactivity = 0
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable
Target Organ(s): Not applicable or unknown

(Contd. on page 2)
**3 Composition/information on ingredients**

**Chemical characterization: Mixtures**

**Description:** The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

**Dangerous components:**

- 67-68-5 dimethyl sulfoxide 5-10%

**Additional information:** For the wording of the listed risk phrases refer to section 15.

**4 First-aid measures**

**Description of first aid measures**

**General information:** No special measures required.

**After inhalation:** If the patient feels unwell or is concerned, obtain medical advice.

**After skin contact:** Generally the product does not irritate the skin.

**After eye contact:** Rinse opened eye for several minutes under running water.

**After swallowing:** If the patient feels unwell or is concerned, obtain medical advice.

**Information for doctor:**

- Most important symptoms and effects, both acute and delayed
  - None
  - No further relevant information available.

- Indication of any immediate medical attention and special treatment needed
  - No further relevant information available.

**5 Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

**Special hazards arising from the substance or mixture**

- None known
  - No further relevant information available.

**Advice for firefighters**

- No special advice

**Protective equipment:** No special measures required.

**6 Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

- Not required.

**Environmental precautions:**

- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:**

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

**Reference to other sections**

- No dangerous substances are released.
7 Handling and storage

Handling:
Precautions for safe handling: No special measures required.
Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

Control parameters
Components with limit values that require monitoring at the workplace:
67-68-5 dimethyl sulfoxide
WEEL Long-term value: 250 ppm

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Breathing equipment: Not required.
Protection of hands: Not required.
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information
Appearance:
Form: Fluid
Color: Colorless
Odor: Not determined
Odor threshold: Not determined.

pH-value at 20 °C (68 °F): 
7

Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.
## 51.1.1 Flash point:
> 60 °C (> 140 °F)

## 51.1.2 Flammability (solid, gaseous):
Not applicable.

## 51.1.3 Ignition temperature:
270 °C (518 °F)

## 51.1.4 Decomposition temperature:
Not determined.

## 51.1.5 Auto igniting:
Product is not selfigniting.

## 51.1.6 Danger of explosion:
Product does not present an explosion hazard.

### 51.1.6.1 Explosion limits:
- **Lower:** Not determined.
- **Upper:** Not determined.

## 51.1.7 Vapor pressure:
Not determined.

## 51.1.8 Density:
Not determined.

## 51.1.9 Relative density
Not determined.

## 51.1.10 Vapor density
Not determined.

## 51.1.11 Evaporation rate
Not determined.

### 51.1.11.1 Solubility in / Miscibility with Water:
Fully miscible.

## 51.1.12 Partition coefficient (n-octanol/water):
Not determined.

### 51.1.13 Viscosity:
- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

## 51.1.14 Organic solvents:
7.0 %

## 51.1.15 Water:
90.1 %

## 51.1.16 VOC content:
7.00 %

## 51.1.17 Solids content:
0.3 %

### 51.1.18 Other information
No further relevant information available.

## 10 Stability and reactivity

### Reactivity
No further relevant information available.

### Chemical stability
No decomposition if used according to specifications.

### Thermal decomposition / conditions to be avoided
No dangerous reactions known.

### Possibility of hazardous reactions
No further relevant information available.

### Conditions to avoid
No further relevant information available.

### Incompatible materials
No further relevant information available.

### Hazardous decomposition products
No dangerous decomposition products known.

## 11 Toxicological information

### Information on toxicological effects

#### Acute toxicity:
No data available.

#### LD/LC50 values that are relevant for classification:
No data available.

#### Primary irritant effect:
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

#### Sensitization:
No sensitizing effects known.
12 Ecological information

Toxicity
Aquatic toxicity:
Not available
No further relevant information available.

Persistence and degradability
Not available
No further relevant information available.

Bioaccumulative potential
Not known
No further relevant information available.

Mobility in soil
No further relevant information available.

Ecotoxicological effects:
Remark: Not available

Additional ecological information:
General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects
No further relevant information available.

13 Disposal considerations

Waste treatment methods
Recommendation:
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number
Not hazardous for transportation
### 15 Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Sara**

- **Section 355 (extremely hazardous substances):**
  - None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**
  - None of the ingredients are listed.

**TSCA (Toxic Substances Control Act) Inventory:**
- 67-68-5 dimethyl sulfoxide

**Hazardous Air Pollutants**
- None of the ingredients are listed.

**Proposition 65**
- **Chemicals known to cause cancer:**
  - None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**
  - None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**
  - None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**
  - None of the ingredients are listed.

**Cancerogenity categories**

- **EPA (Environmental Protection Agency):**
  - None of the ingredients are listed.

- **TLV (Threshold Limit Value established by ACGIH):**
  - None of the ingredients are listed.
Trade name: HB101 Competent Cells, High Efficiency

NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients are listed.

GHS label elements Not applicable
Signal word Not applicable
Hazard statements Not applicable

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:
Promega Corporation
Chemical Regulatory Department
2800 Woods Hollow Road
Madison, WI
Ph: (608) 274-4330
Date of preparation / last revision 12/15/2020 / 1.0
Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
* Data compared to the previous version altered.