SECTION 2) HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture according to United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).

Hazard not otherwise classified (HNOC)

Biosafety Level 1 Agents not known to consistently cause disease in healthy adults and present minimal potential hazard to laboratory personnel and the environment.

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

This substance contains no ingredients at concentrations to be considered hazardous as defined by OSHA 29CFR 1910.1200 however this product should be handled according to good lab practices, with proper personal protective equipment, proper engineering controls and within the parameters of the purchaser’s chemical hygiene plan.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell or are concerned.

4.1 Description of measures

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Flush eyes with water for 15-20 minutes while holding eyelids open. Take care not to rinse contaminated water into the unaffected eye or onto the face.

Skin Contact

Take off all contaminated clothing immediately, shoes and leather goods (e.g. watchbands, belts). If skin irritation occurs or rash occurs: Get medical advice/attention. Wash with soap and plenty of water. Wash contaminated clothing before re-use or discard.

Ingestion

Rinse mouth with water. Do not give anything by mouth to an unconscious person. Call a POISON CENTER/doctor if you feel unwell.

Most Important Symptoms/Effects, Acute and Delayed

Refer to Sec. 2 and 11
SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Use caution when applying carbon dioxide in confined spaces.

Specific Hazards arising from substance or mixture
No data available.

Advice for Firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Further Information
No data available.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid breathing vapors, mist or gas. Avoid dust/aerosol formation. Isolate hazard area and keep unauthorized personnel away. For personal protection see section 8.

Environmental Precautions
Stop spill/release if it can be done safely. Do not allow product to reach ground water, water course or sewage system.

Methods and Materials for Containment and Cleanup
Allow aerosols to settle; wearing protective clothing, gently cover spill with paper towel and apply 10% sodium hypochlorite solution, starting at perimeter and working towards the center; allow sufficient contact time before clean up (30 min) Absorb spill with inert material (e.g. Vermiculite, sand, earth) then place in a suitable container. Clean up spills immediately, observing precautions in the Sections 6 and 8. Provide ventilation. The use of additional PPE may be necessary for cleaning solutions.

SECTION 7) HANDLING AND STORAGE

Precautions for safe handling
Provide appropriate exhaust ventilation. See sec. 2 for additional precautions.

Conditions for safe storage, including any incompatibilities
Store in dry, well-ventilated areas. Keep containers securely sealed when not in use.

Specific end use(s)
Follow established laboratory procedures when handling material.

SECTION 8) EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Eye Protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Body Protection
Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiration Protection
Respiratory protection not required.
### Control Parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA TWA (ppm)</th>
<th>OSHA TWA (mg/m³)</th>
<th>OSHA STEL (ppm)</th>
<th>OSHA STEL (mg/m³)</th>
<th>OSHA Tables (Z1, Z2, Z3)</th>
<th>OSHA Carcinogen</th>
<th>OSHA Carcinogen_Threshold for OSHA Carcinogens</th>
<th>OSHA Skin designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No applicable chemical</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>NIOSH TWA (ppm)</th>
<th>NIOSH TWA (mg/m³)</th>
<th>NIOSH STEL (ppm)</th>
<th>NIOSH STEL (mg/m³)</th>
<th>NIOSH Carcinogen</th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH TWA (mg/m³)</th>
<th>ACGIH STEL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No applicable chemical</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH STEL (mg/m³)</th>
<th>ACGIH Carcinogen</th>
<th>ACGIH TLV Basis</th>
<th>ACGIH Notations</th>
</tr>
</thead>
<tbody>
<tr>
<td>No applicable chemical</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

#### Physical and Chemical Properties

Freeze Dried

- **Appearance**: No Data Available
- **Odor Threshold**: No Data Available
- **Odor Description**: No Data Available
- **pH**: No Data Available
- **Water Solubility**: No Data Available
- **Flammability**: N/A
- **Flash Point Symbol**: No Data Available
- **Flash Point**: No Data Available
- **Viscosity**: No Data Available
- **Lower Explosion Level**: No Data Available
- **Upper Explosion Level**: No Data Available
- **Vapor Pressure**: No Data Available
- **Vapor Density**: No Data Available
- **Freezing Point**: No Data Available
- **Melting Point**: No Data Available
- **Low Boiling Point**: No Data Available
- **High Boiling Point**: No Data Available
- **Auto Ignition Temp**: No Data Available
- **Decomposition Pt**: No Data Available
- **Evaporation Rate**: No Data Available
- **Coefficient Water/Oil**: No Data Available

#### Other Information

No data available.
SECTION 10) STABILITY AND REACTIVITY

Stability
Stable under recommended handling and storage conditions

Reactivity
No data available.

Conditions to Avoid
No data available

Hazardous Reactions/Polymerization
Hazardous polymerization will not occur.

Incompatible Materials
No data available

Hazardous Decomposition Products
No data available.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure
Inhalation, ingestion, skin absorption

Acute Toxicity
No data available.

Skin Corrosion/Irritation
No data available.

Serious Eye Damage/Irritation
No data available.

Respiratory/Skin Sensitization
No data available.

Germ Cell Mutagenicity
No data available.

Carcinogenicity
No data available.

Reproductive Toxicity
No data available.

Specific Target Organ Toxicity - Single Exposure
No data available.

Specific Target Organ Toxicity - Repeated Exposure
No data available.

Aspiration Hazard
No data available.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity
No data available.

Persistence and Degradability
No data available.
Bio-accumulative Potential
No data available.

Mobility in Soil
No data available.

Other Adverse Effects
No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal
Product - Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging: Dispose of as unused product.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information
UN number: Not Regulated
Proper shipping name: Not applicable
Hazard class: Not applicable
Packing group: Not applicable
Marine Pollutant: Not applicable
Hazardous substance (RQ): Not applicable
Note / Special Provision: Not applicable
Toxic-Inhalation Hazard: Not applicable

IMDG Information
UN number: Not Regulated
Proper shipping name: Not applicable
Hazard class: Not applicable
Packing group: Not applicable
Marine Pollutant: Not applicable
Note / Special Provision: Not applicable

IATA Information
UN number: Not Regulated
Proper shipping name: Not applicable
Hazard class: Not applicable
Packing group: Not applicable
Note / Special Provision: Not applicable

SECTION 15) REGULATORY INFORMATION

Regulatory Information
The following regulations have been evaluated for this product: DSL, EU_EC_Inventory, EU_EINECS, EU_ELINCS, EU_IOELV, EU_NLP, IARC Carcinogen, and TSCA. This substance is not listed on the TSCA Inventory. It is for research and development use only. This substance is not SARA listed.

SECTION 16) OTHER INFORMATION

Glossary
ACGIH - American Conference of Governmental Industrial Hygienists
BSC - Biological Safety Cabinet
CAS - Chemical Abstract Service
Chemtrec - Chemical Transportation Emergency Center(US)
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
HEPA - High efficiency particulate air
LC - Lethal Concentration

www.atcc.org
**DISCLAIMER**

ATCC warrants that (a) cells and microorganisms included in the ATCC Material shall be viable upon initiation of culture for a period of thirty (30) days after shipment thereof from ATCC and (b) any ATCC Material other than cells and microorganisms shall meet the specifications on the applicable ATCC Material product information sheet, certificate of analysis, and/or catalog description until the expiration date on the applicable ATCC Material’s product label (such thirty (30) day period, or period until the expiration date, referred to herein as the “Warranty Period”). Purchaser’s exclusive remedy, and ATCC’s sole liability, for breach of the warranties set forth in this paragraph is for ATCC to, at ATCC’s sole option, either (i) refund the fee paid to ATCC for such ATCC Material (exclusive of shipping and handling charges), or (ii) replace the ATCC Material. The warranties set forth in this paragraph apply only if Purchaser handles and stores the ATCC Material as described in the applicable ATCC Material product information sheet. To obtain the exclusive remedy, Purchaser must report the lack of viability or non-conformance to specifications to ATCC’s Technical Service Department within the applicable Warranty Period. Any expiration date specified on the ATCC Material shipment documentation states the expected remaining useful life, but does not constitute a warranty or extend any applicable Warranty Period. Except as expressly provided above, the ATCC Material and any technical information and assistance provided by ATCC are provided as-is, without warranties of any kind, express or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, typicality, safety, accuracy and/or non-infringement.