SECTION 1 - SUBSTANCE IDENTITY AND COMPANY INFORMATION

Product Name: LB with 30% glycerol
ATCC Catalog No.: 60-2200

COMPANY INFORMATION: AMERICAN TYPE CULTURE COLLECTION
PO BOX 1549
MANASSAS, VA 20108

FOR INFORMATION CALL: 800-638-6597 or 703-365-2700
AFTER-HOURS CONTACT: 703-365-2710

CHEMTREC EMERGENCY: 800-424-9300 or 703-527-3887

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>CAS NUMBER</th>
<th>EC NUMBER (EINECS)</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLYCEROL</td>
<td>56-81-5</td>
<td>200-289-5</td>
<td>30.0</td>
</tr>
</tbody>
</table>

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
CAUTION.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
WHEN USING, DO NOT EAT OR DRINK.
AVOID CONTACT WITH SKIN AND EYES.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW LABEL WHERE POSSIBLE).
HYGROSCOPIC.

TARGET ORGAN:
KIDNEYS.

SECTION 4 - FIRST AID MEASURES

EYES: FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS AND OCCASIONALLY LIFTING THE UPPER AND LOWER EYELIDS. CALL A PHYSICIAN.
SKIN: IMMEDIATELY WASH SKIN WITH SOAP AND PLENTY OF WATER.
INGESTION: WASH OUT MOUTH WITH WATER AND SUPPLY 3 CUPFULS TO DRINK PROVIDED PERSON IS CONSCIOUS. DO NOT INDUCE VOMITING. CALL A PHYSICIAN.
INHALATION: REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN.
SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:
WATER SPRAY.
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES:
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS:
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
USE INERT ABSORBANT MATERIAL TO CONTAIN AND PICK UP SPILLS.
PLACE IN A SUITABLE CONTAINER, SEAL, LABEL, AND HOLD FOR WASTE DISPOSAL.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7 - HANDLING AND STORAGE

SHIPPED AT ROOM TEMPERATURES (15 to 30° C).  KEEP CONTAINER TIGHTLY CLOSED.
STORE AT REFRIGERATED TEMPERATURES (4 to 8° C).  CULTURE IN FREEZE MEDIUM SHOULD BE STORED FROZEN AT –80° C FOR LONG-TERM STORAGE.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

WEAR CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
AVOID CONTACT WITH EYES, SKIN, CLOTHING AND AVOID INHALATION.
SUPPLEMENTAL VENTILATION IS NOT REQUIRED.  SAFETY SHOWER AND EYE BATH.
WASH THOROUGHLY AFTER HANDLING.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:
LIGHT AMBER COLOR LIQUID.  RELATIVELY ODORLESS.

PHYSICAL PROPERTIES:
BOILING POINT: NOT AVAILABLE
FLASH POINT: >200° C

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:
STABLE.
INCOMPATIBILITIES:
STRONG OXIDIZING AGENTS.  AVOID EXCESS HEAT.
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:
TOXIC FUMES OF CARBON MONOXIDE, CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION:
WILL NOT OCCUR.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:
MAY CAUSE SKIN IRRITATION.
MAY CAUSE EYE IRRITATION.
MAY BE HARMFUL IF INHALED.
MAY BE HARMFUL IF SWALLOWED.
MAY CAUSE ALLERGIC REACTION.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL
PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

CHRONIC EFFECTS.
TARGET ORGANS:
KIDNEYS.
NOT LISTED BY ACGIH, IARC, NTP, NIOSH, OR EPA.

RTECS #: MA8050000

TOXICITY DATA:
LD 50 - ORAL, MOUSE = 4090 MG/KG
LD 50 - ORAL, RAT = >12600 MG/KG

TARGET ORGAN DATA:
BEHAVIORAL (HEADACHE)
GASTROINTESTINAL (NAUSEA OR VOMITING)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS
LISTED HEREIN. SEE ACTUAL ENTRY IN RTECS FOR MORE COMPLETE INFORMATION.

SECTION 12 - ECOLOGICAL INFORMATION

DATA NOT AVAILABLE.

SECTION 13 - DISPOSAL CONSIDERATIONS

CONTACT A LICENSED WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.
OBSERVE ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14 - TRANSPORT INFORMATION

THIS PRODUCT CONTAINS NO HAZARDOUS SUBSTANCES AS DEFINED BY THE DEPARTMENT
OF TRANSPORTATION REGULATIONS, CODIFIED IN TITLE 49 CFR SECTION 171.8 AT
REPORTABLE QUANTITIES ACCORDING TO TABLE 1 OF APPENDIX A OF 49 CFR §172.101.
SECTION 15 - REGULATORY INFORMATION

EUROPEAN INFORMATION:
SYMBOL OF DANGER – NOT AVAILABLE.
RISK PHRASES 36/37/38
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
SAFETY PHRASES 20, 24/25, 26, 36/37, 45
WHEN USING, DO NOT EAT OR DRINK.
AVOID CONTACT WITH SKIN AND EYES.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW LABEL WHERE POSSIBLE).

REVIEWS, STANDARDS, AND REGULATIONS:
OEL=MAK
ACGIH TWA 10 MG/M3
OSHA PEL TWA 15 MG/M3 TOTAL DUST
OSHA PEL TWA 5 MG/M3 RESPIRABLE FRACTION

SECTION 16 - OTHER INFORMATION

THE INFORMATION PRESENTED IN THIS DOCUMENT IS BELIEVED TO BE CORRECT BASED UPON DATA AVAILABLE TO ATCC. USERS SHOULD MAKE AN INDEPENDENT DECISION REGARDING THE ACCURACY OF THIS INFORMATION BASED ON THEIR NEEDS AND DATA AVAILABLE TO THEM. ALL SUBSTANCES AND MIXTURES MAY PRESENT UNKNOWN HAZARDS AND ALL NECESSARY SAFETY PRECAUTIONS SHOULD BE TAKEN. ATCC ASSUMES NO LIABILITY RESULTING FROM USING OR COMING IN CONTACT WITH THIS SUBSTANCE.

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