**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

1. **Product identifier**
   - **Product form**: Mixture, liquid
   - **Product group**: Trade product
   - **Product code**: LB-GLYVAK/2
   - **Part number**: SP-GVAK series

2. **Relevant identified uses**
   - **Use of the substance/preparation**: Scale removal in vacuum waste lines

3. **Details of the supplier of the safety data sheet**
   - Celeste Industries Corporation
   - 8221 Teal Drive, suite 405
   - Easton, Maryland 21601 (USA)
   - Within USA: (410) 822-5775
   - International: 00 (1) 410-822-5775
   - e-mail: info@celestecorp.com

4. **Emergency telephone number**
   - **Emergency contact number**: For Chemical Emergency, Spill, Leak, Fire, Exposure or Accident call CHEMTREC (24 hours) within USA and CANADA: 1-800-424-9300
   - Outside USA and Canada (collect call accepted): 1-703-527-3883

**SECTION 2: Hazards identification**

1. **Classification of the mixture**
   - **Classification according to CLP Regulation (EC) No 1272/2008**
     - Eye Dam. 1, H318
     - Skin Irrit. 2, H315
     - STOT SE3, H335
   - **Full text of H-phrases**: see section 16
   - **Adverse physicochemical, human health and environmental effects**: No data available

2. **Label elements**
   - **Classification according to CLP Regulation (EC) No 1272/2008**
     - **Hazard Pictogram**: ![Hazard Pictogram]
   - **Signal Word**: Danger
   - **Hazard Statement**: H318 – Causes serious eye damage
     - H315 – Causes skin irritation
     - H335 – May cause respiratory irritation
   - **Precaution Statement**: P280 – Wear protective gloves/protective clothing/eye protection/face protection.
     - P302 + P350 – IF ON SKIN: Gently wash with plenty of soap and water
     - P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
     - P260 – Do not breathe mist, vapors, or fumes.

3. **Other hazards**
   - No additional information available.
SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>l(+)-lactic acid</td>
<td>CAS No. 79-33-4 EC No. 201-196-2</td>
<td>4.2 %</td>
<td>Eye Dam. 1, H318 Skin Irrit. 2, H315</td>
</tr>
<tr>
<td>Methanesulphonic acid</td>
<td>CAS No. 75-75-2 EC No. 200-896-6</td>
<td>1.75 %</td>
<td>Eye Dam. 1, H318 Met. Corr. 1, H290 Acute Tox. 4, H302 &amp; H312 Skin Corr. 1B, H314 STOT SE 3, H335</td>
</tr>
<tr>
<td>Sodium dodecyl diphenyl ether disulfonate</td>
<td>CAS No. 119345-04-9 EC No. 601-601-6</td>
<td>&lt; 2.0 %</td>
<td>Eye Dam. 1, H318 Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>Benzenesulfonic acid, C10-16-alkyl derivs.</td>
<td>CAS No. 68584-22-5 EC No. 271-528-9</td>
<td>&lt; 2.0 %</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>Alanine, N,N-bis(carboxymethyl)-, sodium salt (1:3)</td>
<td>CAS No. 164462-16-2</td>
<td>&lt; 1.4 %</td>
<td>Met. Corr. 1, H290</td>
</tr>
</tbody>
</table>

For a full text of phrases, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation
: If respiratory irritation occurs upon inhalation, remove to fresh air. Seek medical attention if symptoms develop or persist.

First-aid measures after skin contact
: If splashed or spilled on skin, rinse with plenty of water.

First-aid measures after eye contact
: Immediately flush eyes thoroughly with water for at least 15 minutes; seek medical treatment.

First-aid measures after ingestion
: Seek medical attention immediately. If the person is fully conscious, make him/her drink water. Never give an unconscious person anything to drink. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation
: Inhalation of mist or aerosol may cause irritation to nose and throat

Symptoms/injuries after skin contact
: May cause irritation or drying of skin.

Symptoms/injuries after eye contact
: May cause damage to the eyes.

Symptoms/injuries after ingestion
: May cause irritation to the respiratory tract and to other mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
: Carbon dioxide (CO2). Dry chemical powder. Water spray.

Unsuitable extinguishing media
: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard
: Non combustible

Reactivity
: Stable under normal conditions of use.

5.3. Advice for firefighters

Protective equipment for firefighters
: Wear proper protective equipment including self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures
: Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Protective equipment
: Chemical resistant gloves as needed. Use splash goggles to prevent eye contact.

6.1.2. For emergency responders

Protective equipment
: Chemical resistant gloves. Use splash goggles when eye contact due to splashing is possible.

6.2. Environmental precautions

No special requirements
6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, dike with dirt, then remove by vacuum truck for disposal.

6.4. Reference to other sections

Refer to sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Avoid contact with skin and eyes. Wear protective personal protection equipment.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Provide adequate ventilation.

Storage condition(s): Store in dry, cool, well-ventilated area; avoid freezing.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

Appropriate engineering controls: Ensure adequate ventilation.

Personal protective equipment: Chemical resistant gloves; protective eye wear.

Hand protection: Chemical resistant gloves.

Eye protection: Wear protective eye ware.

Skin and body protection: Plastic apron to protect clothing. Wear suitable protective clothing.

Respiratory protection: Normally not required. Avoid breathing mist or fumes.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: Viscous

Colour: Amber, straw colored

Odour: None

Odour threshold: No data available

pH: < 2.0

Melting point: No data available

Freezing point: 0 °C

Boiling point: 100 °C

Flash point: None

Relative evaporation rate (butylacetate=1): Not applicable

Flammability (solid, gas): No data available

Explosive limits: Not applicable

Vapour pressure: No data available

Relative vapour density at 20 °C: Not applicable

Relative density: No data available

Density: 0.95 – 1.05

Solubility: Soluble in water

Log Pow: No data available

Log Kow: No data available

Self ignition temperature: No data available

Decomposition temperature: No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

Explosive properties: Not explosive or oxidizing
9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions of use.

10.2. Chemical stability
Stable under normal conditions of use.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
No data available

10.5. Incompatible materials
No data available

10.6. Hazardous decomposition products
None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

Gly-Vak

<table>
<thead>
<tr>
<th>LD50 oral rat</th>
<th>&gt; 10000 mg/kg 10% Hydroxy acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal rat</td>
<td>Not applicable – not absorbable through the skin</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Causes skin irritation
pH: <2.0

Serious eye damage/irritation : Causes serious eye damage
pH: <2.0

Respiratory or skin sensitisation : May cause respiratory irritation

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity
No significant harmful effects anticipated.

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment

Gly-Vak

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Regional legislation (waste) : Dispose of contents/container to comply with applicable local, national and international regulations.
Waste disposal recommendations: Comply with local regulations for disposal.

SECTION 14: Transport information
Not classified as dangerous for transport.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations
Contains no REACH candidate substance

15.1.2. National regulations
No data available

15.2. Chemical safety assessment
CSA has not been established

SECTION 16: Other information

Sources of Key data: SDS, MSDS

Full text of phrases:

Acute Tox. 4 (Dermal) Acute toxicity (dermal) Category 4
Eye Dam. 1 Serious eye damage/eye irritation Category 1
Eye Irrit. 2 Eye Irritant, Category 2
Skin Irrit. 2 Skin corrosion/irritation Category 2
Skin Corr. 1B Skin corrosivity, Category 1
Aquatic Chronic, 2 Aquatic Chronic, Category 2
Met. Corr. 1 Metal Corrosive, Category 1
STOT SE 3 Specific Target Organ Toxicity, Single Exposure, Category 3 (Lungs)
H302 Harmful if swallowed
H312 Harmful if in contact with skin
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation
H411 Toxic to aquatic life with long lasting effects
H290 May be corrosive to metals
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P260 Do not breathe mist, vapors, or fumes.

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