
Issuing Date:  2018-11-06  Version:  1

SECTION 1. Identification

Product identifier

Product No
6952

Product name
Acetylated-Lysine (Ac-K-100) MultiMab™ Rabbit mAb mix (HRP Conjugate)

Recommended use of the chemical and restrictions on use

Identified uses
This product is intended for research purposes only.

Manufacturer, importer, supplier

Manufacturer address
Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923
United States
TEL: +1 978 867 2300
FAX: +1 978 867 2400

Website
www.cellsignal.com

Email address
support@cellsignal.com

Emergency telephone number
In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

This substance/mixture is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label elements, including precautionary statements

Signal Word
None.

Hazard statement(s)
None.

Precautionary Statement(s)
None.

Supplementary Hazard Information

No information available.

Hazards not otherwise classified (HNOC)
Not applicable.
SECTION 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>56-81-5</td>
<td>30-60</td>
</tr>
</tbody>
</table>

SECTION 4. First-aid measures

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.
Consult a physician.

Skin contact
Wash skin with soap and water.

Inhalation
Move to fresh air.

Ingestion
Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed
Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

Advice for emergency responders

<table>
<thead>
<tr>
<th>General advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>For further assistance, contact your local Poison Control Center.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protection of first-aiders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.</td>
</tr>
</tbody>
</table>

SECTION 5. Fire-fighting measures

Extinguishing media

<table>
<thead>
<tr>
<th>Suitable Extinguishing Media</th>
<th>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable Extinguishing Media</td>
<td>None.</td>
</tr>
</tbody>
</table>

Specific hazards arising from the chemical
No information available.

Explosion Data

<table>
<thead>
<tr>
<th>Sensitivity to Mechanical Impact</th>
<th>None.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity to Static Discharge</td>
<td>None.</td>
</tr>
</tbody>
</table>

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

<table>
<thead>
<tr>
<th>For non-emergency personnel</th>
<th>Avoid contact with skin, eyes and clothing. Use personal protective equipment.</th>
</tr>
</thead>
</table>
Other information

No information available.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

SECTION 7. Handling and storage

Precautions for safe handling
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions
Keep containers tightly closed in a dry, cool and well-ventilated place.

Packaging material
No information available.

Incompatible products
Strong oxidizing agents, Metals.

SECTION 8. Exposure controls/personal protection

Control parameters

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>-</td>
<td>TWA mist, total particulate: 15 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA mist, respirable fraction: 5 mg/m³</td>
<td>-</td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Shower, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment
Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

Eye/face protection
Safety glasses with side-shields

Skin and body protection
Wear protective gloves/clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Appearance</th>
<th>Odor</th>
<th>Color</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Clear</td>
<td>No information available</td>
<td>Colorless</td>
<td>No information available</td>
</tr>
</tbody>
</table>
SECTION 10. Stability and reactivity

Reactivity
No information available.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions

<table>
<thead>
<tr>
<th>Hazardous reactions</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>None under normal processing.</td>
<td></td>
</tr>
</tbody>
</table>

Hazardous polymerization
None under normal processing.

Conditions to Avoid
Protect from light. Extremes of temperature and direct sunlight.

Incompatible Materials
Strong oxidizing agents. Metals.

Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon oxides (COx). Nitrogen oxides (NOx).

SECTION 11. Toxicological information

Information on likely routes of exposure

Inhalation
Avoid breathing vapors or mists.
Eye contact  
Avoid contact with eyes.

Skin contact  
Avoid contact with skin.

Ingestion  
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects
This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>= 12600 mg/kg (Rat)</td>
<td>&gt; 10 g/kg (Rabbit)</td>
<td>&gt; 570 mg/m³ (Rat) 1 h</td>
</tr>
</tbody>
</table>

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms  
Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Sensitization  
No information available.

Mutagenic effects  
No information available.

Carcinogenicity  
No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity  
No information available.

STOT - single exposure  
No information available.

STOT - repeated exposure  
No information available.

Neurological effects  
No information available.

Aspiration Hazard  
No information available.

SECTION 12. Ecological information

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>-</td>
<td>LC50 51 - 57 mL/L (Oncorhynchus mykiss) 96 h</td>
<td>EC50 500 mg/L (Daphnia magna) 24 h</td>
</tr>
</tbody>
</table>

Persistence and degradability  
No information available.

Bioaccumulation  
No information available.

Mobility  
No information available.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Octanol-Water Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>-1.76</td>
</tr>
</tbody>
</table>

Other adverse effects
No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods
Dispose of in accordance with all applicable national environmental laws and regulations.

Disposal considerations
Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14. Transport information
This material is not subject to regulation as a hazardous material for shipping.

**SECTION 15. Regulatory information**

**North American Inventory Listing**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>TSCA 8(b)</th>
<th>TSCA 12(b)</th>
<th>DSL</th>
<th>NDSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>Listed</td>
<td>Not Listed</td>
<td>Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

**Canadian Workplace Hazardous Materials Information System (WHMIS) Classification**

This product does not meet the criteria for classification under the Hazardous Products Act.

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

- Acute Health Hazard: No
- Chronic Health Hazard: No
- Fire Hazard: No
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product contains the following U.S. State Right to Know chemicals:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerol</td>
<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>disodium hydrogenorthophosphate</td>
<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**U.S. FIFRA Label Information**

This product does not contain any substances regulated as pesticides.
SECTION 16. Other information

Issuing Date: 2018-11-06

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet