1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Product Name United 979 PAPER PUNCH

Other means of identification
SDS # UNITED-979

Recommended use of the chemical and restrictions on use
Recommended Use Pulp and Paper Control
Uses Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet
Supplier Address United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca

Emergency Telephone Number
Company Phone Number 800-323-2594 (to reorder)
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

This product is classified and labeled according to the GHS.

Classification
Respiratory Sensitization Category 1

Label elements
Signal word: Danger

Hazard statements
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Precautionary Statements - Prevention

Precautionary Statements - Response
If exposed or concerned: Get medical advice/attention. If experiencing respiratory symptoms: call a poison center or physician. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

Precautionary Statements - Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Precautionary Statements - Storage
Store according to local rules and regulations.

Hazard(s) not otherwise classified (HNOC)
None known.

Unknown acute toxicity
73.5 percent of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th></th>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trade Secret</td>
<td>-</td>
<td>40-60</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Sodium Citrate</td>
<td>6132-04-3</td>
<td>15-35</td>
<td>*</td>
</tr>
</tbody>
</table>

Chemical characterization: Mixtures. Description: Mixture of substances listed below with nonhazardous additions.

Dangerous Components

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulase 9012-54-8 H334</td>
<td>5-10</td>
</tr>
<tr>
<td>Acid Cellulase 9012-54-8 H334</td>
<td>5-10</td>
</tr>
<tr>
<td>Citric Acid 77-92-9 H319 RTECS: GE7350000</td>
<td>5-10</td>
</tr>
</tbody>
</table>

*If Chemical Name/CAS No. is “proprietary” and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.*

4. FIRST-AID MEASURES

First Aid Measures

**Eye Contact**
Rinse opened eye for several minutes under running water. If eye irritation occurs, consult a doctor.

**Skin Contact**
Generally, the product does not irritate the skin. Wash areas with soap and water. If skin irritation occurs, consult a doctor.

**Inhalation**
Supply fresh air; consult doctor in case of complaints.

**Ingestion**
If swallowed and symptoms occur, consult a doctor.

**Most important symptoms and effects**

**Symptoms**
No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**
Treat symptomatically.
5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable Extinguishing Media None known.

Specific Hazards Arising from the Chemical
If incinerated, product will release the following toxic fumes: Oxides of Carbon.

Hazardous Combustion Products No information available.

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 to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid formation of dust. Ensure adequate ventilation.

Environmental Precautions Damp down dust with water spray. Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up

Methods for Clean-Up and containment Sweep up the material. Avoid the formation of dust. Dispose contaminated material as waste according to Section 13. Ensure adequate ventilation. Dispose of collected material according to regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Avoid contact with skin, eyes and clothing. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Conditions for safe storage, including any incompatibilities

Storage Conditions No special requirements. Store away from incompatible material(s). Store in original container.

Incompatible materials Strong acids, strong bases and strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
All ventilation should be designed in accordance with OSHA standard (29CFR1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Components with occupation exposure limits
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information
The lists that were valid during the creation of this SDS were used as basis.
Appropriate engineering control

Individual protection measures, such as personal protective equipment

**Eye/Face Protection**  Safety goggles are recommended during filling.

**Skin and Body Protection**  Protective gloves recommended*. The glove material has to be impermeable and resistant to the product/the substance and the preparation. Select glove material based on penetration times, rates of diffusion and degradation.

*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 cannot be calculated in advance and has therefore to be checked prior to the application. The exact breath-through time has to be determined and observed by the manufacturer of the protective gloves.

**Respiratory Protection**  Do not breathe dust. Dust mask recommended.

**General Hygiene Considerations**  The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Powder</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Sweetish</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH-value (10 g/l) @ 20°C(68°F):</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>588.2°F (309°C)</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Fully miscible</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>0.5% water</td>
<td></td>
</tr>
<tr>
<td>Auto ignition temperature</td>
<td>Product is not self-igniting</td>
<td></td>
</tr>
<tr>
<td>Ignition Temperature</td>
<td>1010°C (1850°F)</td>
<td></td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solids content</td>
<td>79.5%</td>
<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity**  No further relevant information available.

**Chemical Stability**  Stable under normal conditions.
Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
No further information available.

Thermal decomposition / conditions to be avoided
No decomposition if used according to specifications.

Incompatible Materials
Strong acids, strong bases and strong oxidizing agents.

Possibility of hazardous reactions
No dangerous reactions known.

Hazardous Decomposition Products
Oxides of Carbon.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Product Information

Eye Contact
No irritating effect.

Skin Contact
No irritating effect.

Inhalation
Sensitization possible through inhalation.

Ingestion
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid 77-92-9</td>
<td>5400 mg/kg (Rat)</td>
<td>&gt;2000 mg/kg (Rat)</td>
<td>-</td>
</tr>
</tbody>
</table>

Toxicological Information
The product shows the following dangers according to internally approved calculation methods for preparations: Harmful.

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

Sensitization
Sensitization possible through inhalation.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Reproductive toxicity
No information available.

STOT – single and repeated exposure
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Hazards for the aquatic environment are unknown.

Persistence/Degradability
No information available.
Bioaccumulation
No information available.

Mobility
No information available.

Other Adverse Effects
No information available.

General Notes
Not known to be hazardous to water.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable federal, state and local laws and regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Contaminated Packaging
Disposal should be in accordance with applicable federal, state and local laws and regulations. Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT
Not regulated.

IATA
Not regulated.

IMDG
Not regulated.

Special precautions for user
No information available

Transport in bulk according to Annex II of MARPOL73 and the IBC Code
No information available

15. REGULATORY INFORMATION

International Inventories

TSCA
Cellulase/Acid Cellulase (9012-54-8), Citric Acid (77-92-9) and Water, de-ionized (7732-18-5).

US Federal Regulations

SARA 355 Extremely hazardous substance
No ingredients listed.

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

GHS Symbol
Danger. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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).
California Proposition 65
This product does not contain chemical(s) known to the State of California to cause cancer and/or cause birth defects or other reproductive harm.

National Regulations
None of the ingredients are listed.

U.S. State Right-to-Know Regulations
All ingredients are listed.

Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>E</td>
</tr>
</tbody>
</table>

Issue Date: 03-Jul-2018  
Revision Date: 12-Nov-2018  
Revision Note: Revisions to Section 9 and 15

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 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