1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name: Zamboni Fixative
   Part Number: 1459
   CAS-No.: Not applicable
   SDS Number: 4680

1.2 Recommended Use: Laboratory Chemicals

1.3 Company: Newcomer Supply
   2505 Parview Road
   Middleton, WI 53562 USA
   Telephone: 1-800-383-7799
   Fax: 1-608-831-0866
   Website: www.newcomerssupply.com
   Email: info@newcomerssupply.com

2. HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture
   GHS Classification, (in accordance with 29 CFR1910.1200)
   Skin sensitisation, Category 1
   Serious eye damage, Category 1
   Skin irritation, Category 2
   Carcinogenicity, Category 2

2.2 GHS Label elements
   Signal Word: DANGER
   Pictogram:

   Hazard Statement(s):
   · May cause an allergic skin reaction
   · Causes serious eye damage
   · Causes skin irritation
   · Suspected of causing cancer

   Precautionary Statement(s):
   Prevention:
   · Obtain special instructions before use.
   · Do not handle until all safety precautions have been read and understood.
   · Do not breathe dust/fume/gas/mist/vapours/spray.
   · Contaminated work clothing should not be allowed out of the workplace.
   · Wear protective gloves/protective clothing/eye protection/face protection.

   Response:
   · IF ON SKIN: Gently wash with plenty of soap and water.
   · Take off contaminated clothing and wash before reuse.
   · If skin irritation or a rash occurs: Get medical advice/attention.
   · IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy
to do – continue rinsing.
   · Specific treatment: see first aid measures in section 4.
   · Immediately call a POISON CENTER or doctor/physician.

   Storage:
   · Store locked up.

   Disposal:
   · Dispose of contents/ container to an approved waste disposal plant.

2.3 Description of any hazards not otherwise classified
   None

24 HOUR EMERGENCY CONTACT
CALL CHEMTREC: 1-800-424-9300
Contact CHEMTREC only in the event of an emergency involving a chemical spill, leak, fire, exposure or other accident.
2.4 >1% of mixture with unknown acute toxicity

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Hazardous Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Paraformaldehyde</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>30525-89-4</td>
</tr>
<tr>
<td>Name</td>
<td>Picric Acid</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>88-89-1</td>
</tr>
<tr>
<td>Name</td>
<td>Sodium Hydroxide</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>1310-73-2</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

4.1 Description of necessary measures

Inhalation (breathing)
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Eye Contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion (swallowed)
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

4.2 Most important symptoms and or effects, acute and delayed

The most important symptoms/effects are presented in Section 2 and or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Carbon dioxide, dry chemical, water spray, alcohol-resistant foam.

5.2 Specific hazards arising from the substance or mixture

No data available

5.3 Protective equipment and precautions for fire-fighters

Wear a positive-pressure self-contained breathing apparatus if necessary. Wear chemical resistant clothing as recommended by clothing manufacturer.

NFPA Rating

<table>
<thead>
<tr>
<th>Health hazard</th>
<th>Fire hazard</th>
<th>Reactivity hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Apply personal protective equipment (see Section 8). Use in a properly ventilated area. Avoid breathing vapors. Avoid skin contact. Avoid eye contact. Wash hands after use. In case of large spill, remove personnel to a safe area. Keep product away from heat, flame, ignition sources, and reactive materials. Avoid accumulation of vapor to form explosive concentration. Pay particular attention to low areas where vapor accumulates more easily.

6.2 Methods and material for containment and cleaning up
Apply personal protective equipment (see Section 8). Ensure proper ventilation. Contain spill. Prevent further leakage if possible and safe to do so. Evacuate area and limit access. Prevent entry of material into sewage drains and confined areas. Evacuate area and limit access. Prevent entry of material into sewage drains and confined areas. Dispose of any contaminated materials according to local regulations. Eliminate sources of ignition.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

7.2 Conditions for safe storage, including any incompatibilities
Refer to Section 2.2 for proper storage temperature. Store the tightly closed container in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters
Components with limit values that require monitoring at the workplace

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Regulatory</th>
<th>Value</th>
<th>Parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paraformaldehyde</td>
<td>30525-89-4</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>0.75 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL</td>
<td>STEL</td>
<td>2 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>STEL</td>
<td>0.016 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>TWA</td>
<td>2 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV</td>
<td>C</td>
<td>0.3 ppm</td>
<td></td>
</tr>
<tr>
<td>Picric Acid</td>
<td>88-89-1</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>(skin)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>(skin)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>(skin)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>STEL</td>
<td>0.3 mg/m³</td>
<td>(skin)</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>1310-73-2</td>
<td>OSHA PEL</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV</td>
<td>C</td>
<td>2 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH REL</td>
<td>C</td>
<td>2 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

8.2 Exposure Controls
Appropriate engineering controls
Use in a properly ventilated area. Remove/wash before reuse contaminated clothing. Wash hands upon exiting work premises. Use product in an appropriately designated fume hood. Take measures to keep concentrations below acceptable limits.

8.3 Personal Protective Equipment
Eye/Face protection
Safeguard against skin contact by wearing chemical-resistant gloves. If splashing is possible, wear chemical safety goggles and/or a full face shield. Keep eye wash fountain nearby.

**Skin Protection**
Wear chemical-resistant gloves. Gloves should be resistant to components of the product. Refer to glove manufacturer for appropriate type and glove thickness.

**Body Protection**
No data available

**Respiratory Protection**
Respirators should only be used if the employer has implemented a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams, as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).
In case of emergency, entry into unknown concentrations, or escape, wear a self-contained positive-pressure breathing apparatus.

**Other Information**
None

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Yellow liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Water soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity
No data available

#### 10.2 Chemical stability
Stable in a closed container within label-specified storage temperature and expiration date.

#### 10.3 Possibility of hazardous reactions
No data available

#### 10.4 Conditions to avoid
Heat, sparks, open flame, and ignition sources.

#### 10.5 Incompatible materials
No data available
Part Number: 1459

10.6 Hazardous decomposition products
Paraformaldehyde decomposes slowly in water to form toxic and flammable formaldehyde gas.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Inhalation exposure
No data available

Oral exposure
No data available

Dermal exposure
No data available

Skin corrosion/irritation
No data available

Serious eye damage/irritation
No data available

Respiratory or skin sensitization
Paraformaldehyde may cause a skin allergy and an asthma-like allergy. Future exposure can cause asthma attacks with shortness of breath, wheezing, coughing, and/or chest tightness.

Germ Cell mutagenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
Repeated high exposure to paraformaldehyde may affect the kidneys.

Aspiration hazard
No data available

Acute toxicity
Picric Acid:
LD50 rat 200 mg/kg
Sodium hydroxide:
LD50 rat oral 140-340 mg/kg
LD50 rabbit dermal 1350 mg/kg

Carcinogenicity
IARC: Formaldehyde a decomposition product is Group 1, carcinogenic to humans
NTP: Formaldehyde: Known human carcinogen
OSHA: Formaldehyde: Specifically regulated carcinogen

Additional information
RTECS: No data available

12. ECOLOGICAL INFORMATION
12.1 **Ecotoxicity**  
No data available

12.2 **Persistence and degradability**  
No data available

12.3 **Bioaccumulative potential**  
No data available

12.4 **Mobility in soil**  
No data available

12.5 **Other adverse effects**  
No data available

13. **DISPOSAL CONSIDERATIONS**

13.1 **Waste disposal methods**

- **Contents**  
  Dispose of contents in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

- **Contaminated packaging**  
  Dispose of packaging in a safe manner to comply with local, state and federal regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. **TRANSPORT INFORMATION**

- **DOT (US)**
  - **UN-Number**  
    No data available
  - **Proper shipping name**  
    No data available
  - **Hazard class**  
    No data available
  - **Packing group**  
    No data available
  - **Environmental hazards**  
    No data available

15. **REGULATORY INFORMATION**

15.1 **No data available**

16. **OTHER INFORMATION**

Preparation Information  
Newcomer Supply Inc.  
800-383-7799  
[www.newcomersupply.com](http://www.newcomersupply.com)  
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