1 Identification

- **Product identifier**
  - **Trade name**: Buffer for Uranium Testing

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier**: ANDalyze, Inc.
    2109 S.Oak Street
    Suite 102
    Champaign, IL 61820
    Phone: +1 857-453-6740
    Fax: +1 847-386-1277
  - **Emergency telephone number**: +1 217-328-0045

2 Hazard(s) identification

- **Classification of the substance or mixture**
  The product is not classified according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** Non-Regulated Material
  - **Hazard pictograms** Non-Regulated Material
  - **Signal word** Non-Regulated Material
  - **Hazard statements** Non-Regulated Material

- **Classification system**:
  - **NFPA ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - Health = 0
    - Fire = 0
    - Reactivity = 0

3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>7647-14-5 sodium chloride</td>
<td>STOT SE 3, H335</td>
</tr>
<tr>
<td>71119-23-8 4-Morpholineethanesulfonicacid, sodium salt</td>
<td>Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320</td>
</tr>
<tr>
<td>7786-30-3 Magnesium Chloride</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335</td>
</tr>
</tbody>
</table>

4 First-aid measures

- **Description of first aid measures**
- **General information**: No special measures required.
- **After inhalation**: Supply fresh air; consult doctor in case of complaints.
- **After skin contact**: Generally the product does not irritate the skin.

(Contd. on page 2)
5 Fire-fighting measures

- **Extinguishing media**
  - **Suitable extinguishing agents:**
    - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - **Special hazards arising from the substance or mixture** No further relevant information available.
  - **Advice for firefighters**
    - **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
  - Dilute with plenty of water.
  - Do not allow to enter sewers/surface or ground water.
  - **Methods and material for containment and cleaning up:**
    - Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
  - **Reference to other sections**
    - See Section 7 for information on safe handling.
    - See Section 8 for information on personal protection equipment.
    - See Section 13 for disposal information.

7 Handling and storage

- **Precautions for safe handling** No special measures required.
  - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** No special requirements.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
  - **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    - 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 were used as basis.
- **Exposure controls**
  - **Personal protective equipment:**
  - **General protective and hygienic measures:**
    - The usual precautionary measures for handling chemicals should be followed.
  - **Breathing equipment:** Not required.
  - **Protection of hands:** Not required.
Trade name: Buffer for Uranium Testing

- **Eye protection:** Not required.

### 9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
  - Appearance:
    - **Form:** Liquid
    - **Color:** Clear
  - **Odor:** Odorless
  - **Odor threshold:** Not determined.
  - **pH-value:** Not determined.
  - **Change in condition**
    - **Melting point/Melting range:** Not determined.
    - **Boiling point/Boiling range:** 100 °C (212 °F)
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** Not applicable.
  - **Ignition temperature:**
    - **Decomposition temperature:** Not determined.
  - **Auto igniting:** Product is not selfigniting.
  - **Danger of explosion:** Product does not present an explosion hazard.
  - **Explosion limits:**
    - **Lower:** 0.0 Vol %
    - **Upper:** 0.0 Vol %
  - **Vapor pressure @ 20 °C (68 °F):** 23 hPa (17 mm Hg)
  - **Density:** Not determined.
  - **Relative density**
  - **Vapour density**
  - **Evaporation rate**
  - **Solubility in / Miscibility with**
    - **Water:** Fully miscible.
  - **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not determined.
  - **Kinematic:** Not determined.
- **Solvent content:**
  - **Organic solvents:** 0.0 %
  - **Water:** 85.0 %
  - **VOC content:** 6.4 %
  - **Solids content:** 8.6 %
  - **Other information**
    - No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
Safety Data Sheet (SDS)

Printing date 05/05/2014 Reviewed on 05/05/2014

Trade name: Buffer for Uranium Testing

(Contd. of page 3)

11 Toxicological information

· Information on toxicological effects
  · Acute toxicity:
    · Primary irritant effect:
      · on the skin: No irritant effect.
      · on the eye: No irritating effect.
    · Sensitization: No sensitizing effects known.
  · Additional toxicological information:
    The product is not subject to classification according to internally approved calculation methods for preparations:
    When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories
  · IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  · NTP (National Toxicology Program)
    None of the ingredients is listed.
  · OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

*12 Ecological information

· Toxicity
  · Aquatic toxicity: No further relevant information available.
  · Persistence and degradability No further relevant information available.
  · Bioaccumulative potential No further relevant information available.
  · Mobility in soil No further relevant information available.
  · Additional ecological information:
    · General notes:
      Water hazard class 1 (Self-assessment): slightly hazardous for water
      Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    · Results of PBT and vPvB assessment
      · PBT: Not applicable.
      · vPvB: Not applicable.
      · Other adverse effects No further relevant information available.

*13 Disposal considerations

· Waste treatment methods
  · Recommendation: Smaller quantities can be disposed of with household waste.

· Uncleaned packagings:
  · Recommendation: Disposal must be made according to official regulations.

(Contd. on page 5)
**Safety Data Sheet (SDS)**

**Trade name:** Buffer for Uranium Testing

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **UN-Number**
- **DOT, ADR, ADN, IMDG, IATA**
- **UN proper shipping name**
- **DOT, ADR, ADN, IMDG, IATA**
- **Transport hazard class(es)**
- **DOT, ADR, ADN, IMDG, IATA**
- **Class**
- **DOT, ADR, IMDG, IATA**
- **Packing group**
- **DOT, ADR, IMDG, IATA**
- **Environmental hazards:**
- **Marine pollutant:**
- **Special precautions for user**
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
- **UN "Model Regulation":**

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
  - **Section 355 (extremely hazardous substances):**
  - **None of the ingredients is listed.**
  - **Section 313 (Specific toxic chemical listings):**
  - **None of the ingredients is listed.**
  - **TSCA (Toxic Substances Control Act):**
  - **All ingredients are listed.**
  - **Proposition 65**
  - **Chemicals known to cause cancer:**
  - **None of the ingredients is listed.**
  - **Chemicals known to cause reproductive toxicity for females:**
  - **None of the ingredients is listed.**
  - **Chemicals known to cause reproductive toxicity for males:**
  - **None of the ingredients is listed.**
  - **Chemicals known to cause developmental toxicity:**
  - **None of the ingredients is listed.**
  - **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
  - **None of the ingredients is listed.**
  - **TLV (Threshold Limit Value established by ACGIH)**
  - **None of the ingredients is listed.**
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - **None of the ingredients is listed.**
  - **GHS label elements**
  - **Non-Regulated Material**

(Contd. on page 6)
Trade name: Buffer for Uranium Testing

· **Hazard pictograms** Non-Regulated Material
  · **Signal word** Non-Regulated Material
  · **Hazard statements** Non-Regulated Material

**National regulations:**
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· **State Right to Know**
  All ingredients are listed.

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

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 05/05/2014 / 2

· **Abbreviations and acronyms:**
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  VOC: Volatile Organic Compounds (USA, EU)
  Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
  Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
  STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

* Data compared to the previous version altered.

SDS / MSDS Created by MSDS Authoring Services (www.MSDSAuthoring.com)