SECTION 1: COMPANY AND PRODUCT INFORMATION

1.1 Product identifiers
   Product name: Bradford Reagent (Ready-to-Use)
   Product code: 20830002
   CAS number: Not Available
   Synonyms: Not Available

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Identified uses: For research and laboratory use only.

1.3 Details of the supplier of the safety data sheet
   Address: 4150 Tuller Rd.
             Suite 228
             Dublin, OH 43017
   Email: tech@bio-world.com
   Phone: 614-792-8680, Toll free: 1-888-bio-PLUS
   Fax: 614-792-8685

1.4 Emergency telephone number
   Emergency phone: 1-888-bio-PLUS

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture
   Substance/mixture is not classified as hazardous.

2.2 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
   Not classified as hazardous under the GHS.

2.3 Label elements and precautionary statements
   Pictogram: 
   Signal word: Danger
   Hazard statement(s) H290 May be corrosive to metals.
                        H314 Causes severe skin burns and eye damage.
                        H370 Causes damage to organs.
Precautionary statement(s):

- P234 Keep only in original container.
- P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310 Immediately call a POISON CENTER/doctor.
- P321 Specific treatment (see supplemental first aid instructions on this label).
- P363 Wash contaminated clothing before reuse.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
- P406 Store in corrosive resistant stainless steel container with a resistant inner liner.
- P501 Dispose of contents/ container to an approved waste disposal plant.

2.4 **Hazards not otherwise classified (HNOC) or not covered by GHS**

No unclassified hazards known.

2.5 **NFPA Rating**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazard</td>
<td>3</td>
</tr>
<tr>
<td>Fire hazard</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

2.6 **HMIS Rating**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazard</td>
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</tr>
<tr>
<td>Chronic health hazard</td>
<td>3</td>
</tr>
<tr>
<td>Reactivity hazard</td>
<td>0</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

SECTION 3: **COMPOSITION/INFORMATION ON INGREDIENTS**

3.1 **Substances**
### Substance Information

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS#</th>
<th>EC#</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid</td>
<td>7664-38-2</td>
<td>231-633-2</td>
<td>10-20 %</td>
</tr>
<tr>
<td>M.F: H₃PO₄</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.W: 97.994 g/mol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>1-5 %</td>
</tr>
<tr>
<td>M.F: CH₃OH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.W: 32.04 g/mol</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.2 Hazardous components & classification

- Met. Corr. 1; Skin Corr. 1B;
- Eye Dam. 1; H290, H314,
- H318| Flam. Liq. 2; Acute Tox. 3;
- STOT SE 1; H225, H301 +
- H311 + H331, H370

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

**General advice**

Consult a physician if symptoms are severe or persistent. Provide this data sheet to medical personnel. If product is spilled or leaked, evacuate area.

**In case of inhalation**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**In case of ingestion**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

All known important symptoms are described in Section 2 and/or Section 11. No other important symptoms to report.

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

No special treatment indicated. Provide treatment in accordance with exhibited symptoms.

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Suitable extinguishing media

Water spray, alcohol-resistant foam, dry chemical, and carbon dioxide extinguishers are suitable.

#### 5.2 Unsuitable extinguishing media
No known unsuitable extinguishing media.

5.3 Special hazards arising from the substance
No special hazards are known to exist regarding combustion of this product.

5.4 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Provide suitable ventilation. Use any necessary personal protective equipment. Avoid contact with skin and eyes, and avoid creation and inhalation of vapor or dust. Keep all unnecessary personnel away.
For personal protection see section 8

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and material for containment and cleaning up
Use inert absorbent material to absorb any spilled or leaked product. Keep in suitable, closed containers for disposal.
For proper disposal see section 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Provide suitable ventilation. Wear any necessary personal protective equipment.
For precautions see section 2

7.2 Conditions for safe storage, including any incompatibilities
Storage conditions: Store upright, closed container in arid, ventilated environment.

Incompatible materials: Strong oxidizing agents are incompatible with this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
This product is not known to contain any substances with occupational exposure limit values.

8.2 Engineering controls
Follow good industrial hygiene and safety practices when handling product.

8.3 Personal protective equipment
Eye/face protection: Use only government-approved safety glasses with side-shields.

Skin protection: Use gloves when handling product. Inspect gloves before use to ensure suitability for use. Remove without exposing skin to the gloves outer surface. Discard used gloves according to all pertinent laws and/or current good practices (cGXP). Wash hands with soap and water.
Body protection: Wear appropriate clothing. Ensure clothing is in good condition, with no holes or tears. When selecting clothing, consider the concentration and amount of substance to be handled.

Respiratory protection: Use only approved respirators and components which comply with CDC and NIOSH (US) or CEN (EU) regulations. Required only when vapors or aerosols are created.

Control of environmental exposure: Prevent product from entering the environment, especially through public sewers or waterways.

General hygiene considerations: Comply with general industrial hygiene practice guidelines.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- **a)** Appearance: clear-blue
- **b)** Physical states: Liquid
- **c)** Odor: Not Available
- **d)** Odor threshold: Not Available
- **e)** Melting point: Not Available
- **f)** Boiling point range: Not Available
- **g)** pH: Not Available
- **h)** Density: Not Available
- **i)** Flash point: Not Available
- **j)** Evaporation rate: Not Available
- **k)** Flammability: Not Available
- **l)** Upper/lower flammability or explosive limits: Not Available
- **m)** Vapor pressure: Not Available
- **n)** Vapor density: Not Available
- **o)** Relative density: 1.066 g/cm³ at 20 °C (68 °F)
- **p)** Water solubility: Not Available
- **q)** Partition coefficient: n-octanol/water: Not Available
- **r)** Autoignition temperature: Not Available
- **s)** Decomposition temperature: Not Available
- **t)** Kinematic viscosity: Not Available
- **u)** Explosive properties: Not Available
- **v)** Oxidizing properties: Not Available
- **w)** Solubility in other solvents: Not Available
- **x)** Surface tension: Not Available

SECTION 10: STABILITY AND REACTIVITY
10.1 Reactivity
Not Available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Stability note(s)
No special or unusual instability known.

10.4 Polymerization
No known polymerization.

10.5 Possibility of hazardous reactions
No hazardous reactions are known.

10.6 Incompatible materials
Strong oxidizing agents and strong acids/bases are incompatible with this product.

10.7 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Oxides of phosphorus

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Acute toxicity
LD50 Oral : No toxicity data available.

LD50 Dermal : No toxicity data available.

LC50 Inhalation : No toxicity data available.

11.2 Skin corrosion/irritation
No toxicity data available.

11.3 Serious eye damage/eye irritation
No toxicity data available.

11.4 Respiratory or skin sensitization
No toxicity data available.

11.5 Germ cell mutagenicity
No toxicity data available.

11.6 Carcinogenicity
IARC : Product and components are not regulated by the IARC.

ACGIH : Product and components are not regulated by the ACGIH.

NTP : Product and components are not regulated by the NTP.

OSHA : Product and components are not regulated by OSHA.

11.7 Reproductive toxicity
No reproductive toxicity data available.
11.8 Specific target organ toxicity – single exposure
   No specific organ toxicity data available.

11.9 Specific target organ toxicity – repeated exposure
   No specific organ toxicity data available.

11.10 Aspiration hazard
   No aspiration hazard data available.

11.11 Additional Information
   RTECS: No RTECS data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
   Not Available

12.2 Aquatic toxicity
   Not Available

12.3 Persistence and degradability
   Not Available

12.4 Bioaccumulative potential
   Not Available

12.5 Mobility in soil
   Not Available

12.6 Results of PBT and vPvB assessment
   PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.7 Other adverse effect
   Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Product
   Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

13.2 Packaging
   Packaging should be disposed of in the same manner as unused product.

13.3 Recommendation
   Disposal must be made according to official regulations.

SECTION 14: TRANSPORTATION INFORMATION

14.1 DOT (US)
   UN number: 1805| Class: 8| Packing group: III
   Proper shipping name: Phosphoric acid solution
   Reportable Quantity (RQ): | Poison Inhalation Hazard: No
14.2 IMDG
UN number: 1805 | Class: 8 | Packing group: III
Proper shipping name: PHOSPHORIC ACID SOLUTION

14.3 IATA
UN number: 1805 | Class: 8 | Packing group: III
Proper shipping name: Phosphoric acid, solution

SECTION 15: REGULATORY INFORMATION

15.1 SARA
Acute Health Hazard, Chronic Health Hazard

15.2 Clean water act (CWA)
The following components are subject to reporting levels established by SARA Title III, Section 313:
Methanol| CAS-No.67-56-1| Revision Date: 2007-07-01

15.3 Right to know components

Massachusetts : Phosphoric acid| CAS-No.7664-38-2| Revision Date: 1993-04-24
Methanol| CAS-No.67-56-1| Revision Date: 2007-07-01

Pennsylvania : Phosphoric acid| CAS-No.7664-38-2| Revision Date: 1993-04-24
Methanol| CAS-No.67-56-1| Revision Date: 2007-07-01

New Jersey : Phosphoric acid| CAS-No.7664-38-2| Revision Date: 1993-04-24
Methanol| CAS-No.67-56-1| Revision Date: 2007-07-01

California proposition 65 components : WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Methanol| CAS-No.67-56-1| Revision Date: 2012-03-16

SECTION 16: OTHER INFORMATION

16.1 Disclaimer
This product is offered by bioWORLD for research, laboratory or further manufacturing use. Not for human use or consumption. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchant-ability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall bio-WORLD.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if bio-WORLD.com has been advised of the possibility of such damages.

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16.2 Preparation Information
Create Date: 2019-10-23 00:00:00/ Revision Date: 2018-07-26 00:00:00/ Print Date: 2019-10-24