1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING

- **Chemical Name:** Potassium diformate
- **Product Code:** FP63146
- **Synonyms:** Potassium formate(1:2)
- **Recommended uses:** For R&D purposes
- **Supplier:** Carbosynth Ltd, 8&9 Old Station Business Park, Compton, Berkshire, RG20 6NE, UK.
- **Emergency contact numbers:**
  - Telephone: +44 (0)1635 578 444
  - Fax: +44 (0)1635 579 444
  - Mobile: +44 (0)7887 998 634

2. HAZARDS IDENTIFICATION

Irritating to eyes.

**Classification:**

Eye irritation (Category 2A)

**Labelling and precautionary statements:**

- **Pictogram:**
  ![](image)
- **Signal word:** Warning.
- **Hazard statement(s):** H319 Causes serious eye irritation.
- **Precautionary statement(s):**
  - P264 Wash hands thoroughly after handling.
  - P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
  - P305 + P351 + P338 IF IN EYES:
    Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337 + P313 If eye irritation persists: Get medical advice/ attention.
- **Hazard symbol(s):** Xi Irritant.
- **R-phrase(s):** R36 Irritating to eyes.
- **S-phrase(s):** S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Molecular Formula:</th>
<th>Molecular weight:</th>
<th>CAS Number:</th>
<th>EINECS Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH₂O₂·CHKO₂</td>
<td>130.14</td>
<td>20642-05-1</td>
<td>243-934-6</td>
</tr>
</tbody>
</table>

Synonyms: Potassium formate(1:2).

4. FIRST AID MEASURES

Eye contact: Immediately flush eye with copious amounts of water for at least 15 minutes. Get medical aid immediately.

Skin contact: In case of contact remove contaminated clothing and immediately wash affected areas with copious quantities of water and soap for at least 15 minutes. Get medical aid immediately. Wash contaminated clothing before reuse.

Inhalation: Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. Get medical aid.

Ingestion: Do NOT induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Wash out mouth with water provided person is conscious. Call a physician.

Notes to Physician: Treat symptomatically and supportively.

5. FIRE-FIGHTING MEASURES

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

Extinguishing media: In case of fire use water spray, dry chemical powder, carbon dioxide, or alcohol-resistant foam. Avoid use solid streams of water.

Special hazards arising from the substance or mixture: Carbon oxides, potassium oxides.

6. ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Personal precautions: Wear self-contained breathing apparatus, eye protection and gloves. Keep personal hygiene. Avoid contact with
skin and eyes. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition.

Environmental precautions: Do not let product enter the drains, other waterways, or soil. Prevent further leak or spill if safe to do so.

Spills/Leaks: Vacuum, sweep up, or absorb with inert material and place into a suitable disposal container for disposal and dispose of as hazardous waste. Ventilate area, clean up spills and wash spill site after material pickup is complete, observing precautions in the Protective Equipment section.

7. HANDLING AND STORAGE

Handling: Wear appropriate protective clothing - see Section 8. Wash hands thoroughly after handling. Use only under a chemical fume hood. Use with adequate ventilation. Keep away from sources of ignition. Minimize dust generation and accumulation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid formation of dust and aerosols. Avoid breathing fumes. Open and handle container with care. Do not eat, drink, or smoke while handling.

Storage: Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from incompatible substances. Keep away from sources of ignition. Store at room temperature.

8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protection equipment:

Eye protection: Wear appropriate protective safety glasses with side-shields conforming to EN166, chemical safety goggles or face-shield (min. 8-inch) as described by OSHA’s eye and face protection regulations. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Wear appropriate protective gloves to prevent skin exposure, as defined in EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection: Appropriate protective clothing, overalls.

Respiratory protection: Where risk assessment indicates air-purifying respirators are required use a dust mask type P95 (US) or type P1 (EN 143) particle respirator. For higher level protection use
type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Respirators and components must tested and approved under appropriate government standards - NIOSH (US) or CEN (EU).

Hygiene measures: Use good working practices. Wash hands and face thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>solid.</td>
</tr>
<tr>
<td>Odour:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>pH:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Melting point:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Boiling point:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Flammability or explosive limits:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Data not available/does not apply.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Data not available/does not apply.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability:</td>
<td>Stable under recommended temperatures and pressures.</td>
</tr>
<tr>
<td>Conditions to avoid:</td>
<td>Dust generation.</td>
</tr>
<tr>
<td>Incompatibilities with other materials:</td>
<td>Strong oxidizing agents.</td>
</tr>
<tr>
<td>Hazardous decomposition products:</td>
<td>Carbon oxides, potassium oxides.</td>
</tr>
<tr>
<td>Hazardous polymerization:</td>
<td>Data not available.</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTCS #:</td>
<td>Data not available.</td>
</tr>
<tr>
<td>Acute toxicity:</td>
<td>Data not available.</td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
<td>Data not available.</td>
</tr>
</tbody>
</table>

Date of issue: 22 September 2015  Revision Number: 0  Page 4 of 6
Serious eye damage/eye irritation: Data not available.
Respiratory or skin sensitization: Data not available.
Germ cell mutagenicity: Data not available.
Carcinogenicity: Data not available.
Reproductive toxicity: Data not available.
Specific target organ toxicity - single exposure: Data not available.
Specific target organ toxicity - repeated exposure: Data not available.
Aspiration hazard: Data not available.
Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Target organs: Data not available.
Potential health effects:
Eye: Causes serious eye irritation.
Skin: May be harmful by skin absorption.
Ingestion: May be harmful if swallowed.
Inhalation: May be harmful if inhaled.
Chronic: May cause respiratory tract irritation.

12. ECOLOGICAL INFORMATION

Data not available.

13. DISPOSAL CONSIDERATIONS

Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

ADR/RID
Not classified as hazardous for transport.

**IMDG**
Not classified as hazardous for transport.

**IATA**
Not classified as hazardous for transport.

15. **REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. **ADDITIONAL INFORMATION**

Further information on PPE:
European Standard & performance category markings:
- **EN143**: Particulates filter.
- **EN166**: Standard applicable to all types of personal eye protectors.
- **EN374**: Protects hands against chemicals and/or microorganisms.

Gas & vapour protection:
- **A**: Organic vapours
- **B**: Inorganic vapours
- **E**: Acid gases
- **K**: Ammonia and its derivatives

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.