MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY
1.1 Product name: Cryofine CRY151
1.2 Use: Clarification
1.3 Company Address: AB Vickers
Dallow Street
BURTON ON TRENT
Staffs  DE14 2PQ
England

1.4 Service: Tel. 01283 563268  Fax. 01283 511472
1.5 Emergency Tel. 01283 563268
1.6 Health and Safety Information: Tel. 01283 563268  Fax. 01283 511472
E-mail abvickers@lallemand.com

2. HAZARD IDENTIFICATION
Sulphur dioxide may be released on mixing with water. Xn, GHS05, GHS07, Danger

3. COMPOSITION AND INFORMATION ON INGREDIENTS
3.1 Chemical characterisation:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
<th>%</th>
<th>Symbols and Health Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium metabisulphite</td>
<td>16731-55-8</td>
<td>7</td>
<td>Xn, R31/36/37, S26, H302, H318</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
4.1 Skin: Wash with soap and water.
4.2 Eyes: Rinse eyes with plenty of water.
4.3 Inhalation: Remove to fresh air.
4.4 Ingestion: None required. Drink water if required.
4.5 Other information:

5. FIRE FIGHTING MEASURES
5.1 Extinguishing media: CO₂, Foam, Dry Powder or Water
5.2 Unsuitable extinguishing media: None known
5.3 Unusual fire fighting hazards: Sulphur dioxide may be released.
5.4 Special fire fighting procedures: Self contained respirator and protective clothing should be worn.
5.5 Other recommendations: Evacuate area
5.6 Combustion products: Sulphur dioxide, incompletely burned carbon products

6. ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions: Avoid eye and prolonged skin contact.
6.2 Precautions to protect the environment: None established
6.3 Clean up procedures: Use PPE. Sweep or vacuum into sealed container.

7. HANDLING AND STORAGE
7.1 Handling precautions: Avoid eye and prolonged skin contact.
7.2 Storage: Cool and dry in well ventilated area.
7.3 Unsuitable packaging materials: None known
7.4 Incompatibilities: Water plus acid.
7.5 Other information:
8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Exposure controls: See section 7

8.2 Exposure controls for hazardous components:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>If wetted Sulphur dioxide</td>
<td>7446-09-5</td>
<td>2ppm (OES8hrTWA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5ppm (STEL 15min)</td>
</tr>
</tbody>
</table>

8.3 Personal Protective Equipment

- **Respiratory:** Not normally required.
- **Hand:** Protective gloves
- **Eye:** Chemical safety goggles or face-shield.
- **Skin:** No additional PPE normally required.
- **Industrial hygiene:** Exercise good hygiene practices particularly before eating drinking or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance:

- **Form:** Granular Powder
- **Colour:** Off white
- **Odour:** Slight

9.2 Safety related information:

- **pH:** Not determined
- **Boiling point:** Not determined
- **Melting point:** Not determined
- **Flashpoint:** Not determined
- **Flammability:** Not determined
- **Auto-flammability:** Not determined
- **Explosive properties:** Not determined
- **Oxidising properties:** Not determined
- **Vapour pressure:** Not determined
- **Specific gravity:** Not determined
- **Solubility in water:** Not determined
- **Solubility in fat:** Not determined
- **Vapour density (air=1):** Not determined
- **Viscosity:** Not determined
- **% volatiles:** Not determined
- **Molecular weight:** Not determined

Other data:

- **Vapour density (air=1):** Not determined
- **Viscosity:** Not determined
- **% volatiles:** Not determined
- **Molecular weight:** Not determined

10. STABILITY AND REACTIVITY

10.1 Stability: Stable

10.2 Reactivity

- **Conditions to avoid:** Dissolving in water evolves Sulphur dioxide
- **Materials to avoid:** Water
- **Hazardous decomposition products:** Sulphur dioxide

11. TOXICOLOGICAL INFORMATION

Possible health effects:

- **Skin:** No adverse effects normally expected
- **Eyes:** May cause temporary discomfort
- **Inhalation:** No adverse effects normally expected
- **Ingestion:** No adverse effects normally expected

Other information:

- **LD50:** Not available
12. ECOLOGICAL IMPACT
12.1 Elimination:
- Persistence: No specific information available
- Degradability: No specific information available

12.2 Behaviour in aquatic environment:
- Mobility: Not determined
- Bioaccumulation: Not determined

12.3 Ecotoxicity:
- Aquatic: Not determined
- Terrestrial: Not determined

13. WASTE DISPOSAL
13.1 Product disposal: According to local regulations
13.2 Packaging disposal: According to national regulations

14. TRANSPORT INFORMATION
- UNNO: Symbols:
  - Road and rail transport (ADR/RID): Not subject
  - Sea transport (IMO): Not subject
  - Air transport (ICAO): Not subject

15. REGULATORY INFORMATION
15.1 EEC supply classification and labelling:
Contains:
15.2 National legislation:
15.3 Other regulations:
- German waste no.: Not determined
- German water class: Not determined
- German Vbf: Not determined
- German TA – Luft: Not determined
- Ozone depleting chemicals: Not determined
- EINECS: All ingredients listed or exempt
- TSCA: All ingredients listed or exempt
- MITI: Not determined
- DSL: Not determined
- AICS: Not determined

16. OTHER INFORMATION
This product safety data sheet was prepared in compliance with Regulation number 453/2010, which gives a guide to the compilation of Safety Data Sheets.

All information and instructions provided by this MSDS are based on current state scientific technical knowledge at the date indicated on the MSDS. AB Vickers shall not be held responsible for any defect in the product covered by this MSDS should the existence of such a defect not be detectable considering the current state of scientific and technical knowledge.

It is the responsibility of persons in receipt of this MSDS to ensure that the information contained is read and understood by all persons who may come in contact with the material.