1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: PPG-10 METHYL GLUCOSE ETHER
Other name(s): SJC-P10MG; Glucam P-10 Humectant; PPG-20 Methyl Glucose Ether; SJC-P20MG; Glucam P-20 Humectant;

Recommended Use of the Chemical and Restrictions on Use
Cosmetic applications.

Supplier: Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia
ABN: 51 600 546 512
Street Address: 70 Marple Avenue
Villawood NSW 2163
Australia

Telephone Number: +61 2 8717 2929
Facsimile: +61 2 9755 9611
Emergency Telephone: 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Poisons Schedule (SUSMP): None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Proportion</th>
<th>Hazard Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly[oxy(methyl-1,2-ethanediyl)], \alpha.-hydro.-omega.-hydroxy-, ether with methyl \beta.-d-glucopyranoside (4:1)</td>
<td>61849-72-7</td>
<td>100%</td>
<td>-</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.
**Skin Contact:**
If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and water. If irritation occurs seek medical advice.

**Eye Contact:**
If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**Ingestion:**
Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek medical advice.

**Indication of immediate medical attention and special treatment needed:**
Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:**
Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

**Specific hazards arising from the chemical:**
Combustible liquid. On burning will emit toxic fumes, including those of oxides of carbon.

**Special protective equipment and precautions for fire-fighters:**
Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

### 6. ACCIDENTAL RELEASE MEASURES

**Emergency procedures/Environmental precautions:**
If contamination of sewers or waterways has occurred advise local emergency services.

**Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:**
Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

### 7. HANDLING AND STORAGE

**Product Name:** PPG-10 METHYL GLUCOSE ETHER

**Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940.** Refer to State Regulations for storage and transport requirements.

**Precautions for safe handling:**
Avoid skin and eye contact and breathing in vapour, mists and aerosols.

**Conditions for safe storage, including any incompatibilities:**
Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Protect from freezing. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control Parameters: No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls:
Use in well ventilated areas. If inhalation risk exists: Use with local exhaust ventilation or while wearing organic vapour/particulate respirator. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):
The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.

Wear overalls, safety glasses and impervious gloves. If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Viscous liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Pale Yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.1 @ 20°C</td>
</tr>
<tr>
<td>Relative Vapour Density (air=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour Pressure (20 °C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>263 - 271</td>
</tr>
<tr>
<td>Flammability Limits (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point/Range (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point/Range (°C)</td>
<td>&gt;316</td>
</tr>
<tr>
<td>Decomposition Point (°C)</td>
<td>300</td>
</tr>
<tr>
<td>pH</td>
<td>5 - 8</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable under normal conditions of use.
Possibility of hazardous reactions: Hazardous polymerisation will not occur.

Conditions to avoid: Avoid exposure to heat, sources of ignition, and open flame. Do not allow product to freeze.

Incompatible materials: Incompatible with strong acids and strong oxidising agents.

Hazardous decomposition products: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects expected, however, large amounts may cause nausea and vomiting.

Eye contact: May be an eye irritant.

Skin contact: Contact with skin may result in irritation.

Inhalation: Breathing in vapour, mists or aerosols may produce respiratory irritation.

Acute toxicity:
Oral LD50 (rat): >5,000 mg/kg
Dermal LD50 (rabbit): >2,000 mg/kg

Skin corrosion/irritation: Non-irritant.
Serious eye damage/irritation: Only transient irritation is expected.
Respiratory or skin sensitisation: Not a skin sensitisier.

Chronic effects: No information available for the product.

Mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: No information available.
Specific Target Organ Toxicity (STOT) - single exposure: No information available.
Specific Target Organ Toxicity (STOT) - repeated exposure: No information available.
Aspiration hazard: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Avoid contaminating waterways.

Persistence/degradability: Degree of elimination: 34% (20 days) (1)
Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Aquatic toxicity:
- 0.6D EC50 (Bacteria): >5,000 mg/L (1)
- 48hr EC50 (Daphnia magna): >10,000 mg/L (1)
- 96hr LC50 (fathead minnow): >10,000 mg/L (1)

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

Road and Rail Transport
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:
Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS CHEMICAL.

Poisons Schedule (SUSMP): None allocated.

This material is listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Supplier Safety Data Sheet; 08/ 2014.

GLUCAM is a registered trademark.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.
Reason(s) for Issue:
Revised Primary SDS
Product Name change
Addition/Change of synonymous name(s)
Minor Text Changes

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris.