Material Safety Data Sheet  
Carboxymethyl Cellulose, Sodium Salt, Average MW 90.000

**Section 1 - Chemical Product and Company Identification**

**MSDS Name:** Carboxymethyl Cellulose, Sodium Salt, Average MW 90.000  
**Synonyms:** Aquaplast; Carboxymethyl Cellulose; Sodium Carboxymethyl Cellulose; Cellulose Sodium Glycolate.

**Section 2 - Composition, Information on Ingredients**

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9004-32-4</td>
<td>Sodium Carboxymethyl Cellulose</td>
<td>ca 100</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

**Section 3 - Hazards Identification**

**EMERGENCY OVERVIEW**

Appearance: white or yellow solid.  
**Caution!** May cause respiratory and digestive tract irritation. May cause eye and skin irritation. Hygroscopic (absorbs moisture from the air). Good laboratory procedures are recommended when handling this compound. May cause adverse reproductive effects based upon animal studies.  
**Target Organs:** No data found.

**Potential Health Effects**

**Eye:** May cause eye irritation.  
**Skin:** May cause skin irritation.  
**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Low hazard for usual industrial handling.  
**Inhalation:** May cause respiratory tract irritation. Low hazard for usual industrial handling.  
**Chronic:** May cause reproductive and fetal effects.

**Section 4 - First Aid Measures**
**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Wash mouth out with water. Get medical aid if irritation or symptoms occur.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

**Notes to Physician:** Treat symptomatically and supportively.

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**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Do NOT use carbon dioxide or dry chemical.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

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**Section 6 - Accidental Release Measures**

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

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

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**Section 7 - Handling and Storage**

**Handling:** Wash thoroughly after handling. Wash hands before eating. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. No special precautions indicated. Store protected from moisture.
Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carboxymethyl Cellulose</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Sodium Carboxymethyl Cellulose: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** white or yellow

**Odor:** Odorless.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** Soluble in water.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** Not applicable.

**Molecular Weight:** Not available.

Section 10 - Stability and Reactivity
**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, dust generation, excess heat, exposure to moist air or water.

**Incompatibilities with Other Materials:** Moisture.

**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

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### Section 11 - Toxicological Information

**RTECS#:**
CAS# 9004-32-4: FJ5950000

**LD50/LC50:**
CAS# 9004-32-4:
- Inhalation, rat: LC50 = >5800 mg/m3/4H;
- Oral, mouse: LD50 = >27 gm/kg;
- Oral, rabbit: LD50 = >27 gm/kg;
- Oral, rat: LD50 = 27000 mg/kg;
- Skin, rabbit: LD50 = >2 gm/kg;

**Carcinogenicity:**
CAS# 9004-32-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** No information found

**Reproductive Effects:** Adverse reproductive effects have occurred in experimental animals.

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

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### Section 12 - Ecological Information

No information available.

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### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.
Section 14 - Transport Information

<table>
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<tr>
<th>IATA</th>
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<tbody>
<tr>
<td>Shipping Name:</td>
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<tr>
<td>Hazard Class:</td>
</tr>
<tr>
<td>UN Number:</td>
</tr>
<tr>
<td>Packing Group:</td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

Hazard Symbols:
Not available.

Risk Phrases:

Safety Phrases:
S 37 Wear suitable gloves.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 28A After contact with skin, wash immediately with plenty of water

Section 16 - Additional Information

MSDS Creation Date: 8/31/1998
Revision #5 Date: 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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 INDO GULF GROUP 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 INDO GULF GROUP has been advised of the possibility of such damages.