I. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Xanthan Gum  Date Prepared: 7/2010
Generic Description: Xanthan Gum

Supplier:

NOV FluidControl
4310 N Sam Houston Parkway East
Houston, Texas 77032 USA
Office: (713) 482-0500
Fax: (713) 482-0695
Company website: www.nov.com

Emergency Telephone Number:
CHEMTREC: 1-800-424-9300 or International +1-703-527-3887

II. COMPOSITION

<table>
<thead>
<tr>
<th>Material or Component</th>
<th>CAS Number</th>
<th>OSHA PEL</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthan Gum</td>
<td>11138-66-2</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

III. HAZARDS IDENTIFICATION

Hazard Data:

Eyes: May cause irritation to the eyes.

Skin: May be irritating to the skin. Repeated or prolonged contact may cause drying and cracking of the skin.

Ingestion: Not anticipated route of exposure. May cause irritation of digestive tract.

Inhalation: Irritating to the respiratory tract if inhaled. The OSHA PEL for respirable dust is 5 mg/m³ and 15 mg/m³ for total dust.

Chronic Health Effects: None known.

Medical Conditions Aggravated by Exposure: None known.
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IV. FIRST AID MEASURES

Eyes: Immediately flush eyes with large amounts of running water for at least 15 minutes. Get medical advice if irritation develops.

Skin: Immediately wash exposed area with soap and water. Get medical advice if irritation develops.

Ingestion: If large amounts were ingested, give water to drink and get medical advice.

Inhalation: Remove person to fresh air. Get medical advice if breathing difficulty.

Advice to Physicians: Treat symptomatically.

V. FIRE AND EXPLOSION DATA

Flash Point Not applicable
Flammable Limits Not applicable
Fire Extinguishing Media Water, foam, sand, dry chemical or carbon dioxide (CO2)
Unusual Fire and Explosion Hazard None

VI. ACCIDENTAL RELEASE MEASURES

Release or Spill Collect and place in suitable container for reuse or disposal
Personal Precautions Keep away from heat and sources of ignition. Avoid breathing dust.

Environmental Precautions None

VII. HANDLING AND STORAGE

Store in a cool, dry, ventilated area. Keep container tightly closed when not in use. Use good housekeeping in storage and work areas to prevent accumulation of dust. Keep away from oxidizing agents and extreme heat.

VIII. EXPOSURE CONTROL/PERSONAL PROTECTION

Airborne Exposure Limits
OSHA Permissible Exposure Limit (PEL) 15 mg/m3 total dust, 5 mg/m3 respirable fraction for nuisance dusts.

Ventilation Requirements:
A system of local and/or general exhaust is recommended if handled in a confined area to keep airborne levels below recommended exposure limits.

Respiratory Protection
Use NIOSH approved nuisance dust respirator.

Skin Protection
Wear long sleeved clothing and work gloves.
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Eye Protection
Wear safety glasses with side shields. Maintain eye wash station in work area.

Other Protection Equipment/Clothing
As appropriate for work area.

IX. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>7</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.8</td>
</tr>
<tr>
<td>Boiling Range/Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion Limits (%)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Slight</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation Rate (butyl acetate=1)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

X. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use and storage.
Materials to Avoid: Excessive heat, ignition sources and strong oxidizers.
Hazardous Polymerization: Will not occur.
Hazardous Decomposition: CO, CO₂

XI. TOXICOLOGICAL INFORMATION

No acute toxicity data is available for product or components.

XII. ECOLOGICAL INFORMATION

No ecotoxicity data is available. This product is not expected to present an environmental hazard.

XIII. DISPOSAL

Dispose of material in accordance with all local, state, and federal regulations.

XIV. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>UN Proper Shipping Name:</th>
<th>Not regulated</th>
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<tbody>
<tr>
<td>UN Label:</td>
<td>None</td>
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<tr>
<td>UN Number:</td>
<td>None</td>
</tr>
<tr>
<td>Hazardous Ingredients:</td>
<td>None</td>
</tr>
<tr>
<td>Placards:</td>
<td>None</td>
</tr>
<tr>
<td>Reportable Quantity:</td>
<td>None</td>
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</table>
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XV. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>TSCA Listed</th>
<th>Yes</th>
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<tbody>
<tr>
<td>SARA Title III Section 302</td>
<td>No</td>
</tr>
<tr>
<td>SARA Title III Section 311/312</td>
<td>No</td>
</tr>
<tr>
<td>SARA Title III Section 313</td>
<td>No</td>
</tr>
<tr>
<td>WHMIS (Canada):</td>
<td>Not a controlled product</td>
</tr>
<tr>
<td>DSL (Canada)</td>
<td>Listed</td>
</tr>
</tbody>
</table>

XVI. OTHER INFORMATION

NFPA Hazard Codes: Health 1; Flammability 0; Reactivity 0
Ratings based on NPFA

Abbreviations
N/A: Denotes no applicable information found or available
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
BOD: Biological Oxygen Demand

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For further information contact:

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