**Section 1 - IDENTIFICATION**

**Product Identifier:**
Manus Bond 65C

**Recommended Use**
Adhesives / sealant

**Restrictions on Use**
None known.

**Manufacturer Information**
Manus Products, Inc.
866 Industrial Blvd. West
Waconia, MN 55387

Phone: (952) 442-3323

Emergency # (800) 424-9300

**Section 2 - HAZARD(S) IDENTIFICATION**

Classification in accordance with 29 CFR 1910.1200.
- Flammable Liquids, Category 3
- Skin Corrosion / Irritation, Category 2
- Eye Damage / Irritation, Category 2A
- Hazardous to the Aquatic Environment - Acute Hazard, Category 3
- Hazardous to the Aquatic Environment - Chronic Hazard, Category 3

**GHS LABEL ELEMENTS**

**Symbol(s)**

![Flammable Liquid and Corrosive Symbol]

**Signal Word**
WARNING

**Hazard Statement(s)**
- Flammable liquid and vapor
- Causes skin irritation
- Causes serious eye irritation
- Harmful to aquatic life with long lasting effects

**Precautionary Statement(s)**

**Prevention**
Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Avoid release to the environment.
Response

In case of fire: Use appropriate media for extinction. IF exposed or concerned: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage

Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

** *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-95-6</td>
<td>Solvent naphtha, petroleum, light aromatic</td>
<td>60-70</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium dioxide</td>
<td>1-5</td>
</tr>
<tr>
<td>1317-65-3</td>
<td>Calcium Carbonate</td>
<td>1-5</td>
</tr>
<tr>
<td>63449-39-8</td>
<td>Chlorinated paraffin waxes and hydrocarbon waxes</td>
<td>1-5</td>
</tr>
<tr>
<td>1309-48-4</td>
<td>Magnesium oxide (MgO)</td>
<td>1-5</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>Carbon black</td>
<td>0.01-0.09</td>
</tr>
</tbody>
</table>

** *Section 4 - FIRST-AID MEASURES* * *

Description of Necessary Measures

Inhalation

IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated clothing before reuse.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

IF A LARGE AMOUNT IS SWALLOWED, GET IMMEDIATE MEDICAL ATTENTION.

Most Important Symptoms/Effects

Acute

skin irritation and eye irritation

Delayed

No information on significant adverse effects.

Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Treat symptomatically and supportively.

** *Section 5 - FIRE-FIGHTING MEASURES* * *

Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

Unsuitable Extinguishing Media

None known.
Special Hazards Arising from the Chemical

Hazardous Combustion Products

Combustion: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Special Protective Equipment and Precautions for Firefighters

Flammable liquid and vapor.

Fire Fighting Measures

Move material from fire area if it can be done without risk. Cool containers with water. Avoid inhalation of vapors or combustion by-products. Use extinguishing agents appropriate for surrounding fire. Dike for later disposal. Stay upwind and keep out of low areas.

Protective Equipment and Precautions for Firefighters

Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

** *Section 6 - ACCIDENTAL RELEASE MEASURES* **

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Keep unnecessary people away, isolate hazard area and deny entry. Only personnel trained for the hazards of this material should perform clean up and disposal.

Methods and Materials for Containment and Cleaning Up

Eliminate all ignition sources if safe to do so. Ventilate the area. Stop leak if possible without personal risk. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Avoid release to the environment.

** *Section 7 - HANDLING AND STORAGE* **

Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks and flame. Take precautionary measures against static discharge. Do not breathe vapor or mist. Avoid contact with skin and eyes. Do not eat, drink, or smoke when using this product. Always wear recommended personal protective equipment. Wear personal protective clothing and equipment, see Section 8. Wash thoroughly after handling.

Conditions for Safe Storage, including any Incompatibilities

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep container tightly closed. Keep cool. Keep separated from incompatible substances.

Incompatibilities: strong oxidizing materials

** *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* **

Component Exposure Limits

Calcium Carbonate (1317-65-3)

OSHA: 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)

NIOSH: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable dust)

Mexico 10 mg/m³ TWA LMPE-PPT

20 mg/m³ STEL [LMPE-CT]

Titanium dioxide( (13463-67-7)

ACGIH: 10 mg/m³ TWA

OSHA: 15 mg/m³ TWA (total dust)

Mexico 10 mg/m³ TWA LMPE-PPT (as Ti)

20 mg/m³ STEL [LMPE-CT] (as Ti)

Magnesium oxide (MgO) (1309-48-4)
**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>varies</td>
</tr>
<tr>
<td>Odor:</td>
<td>petroleum odor</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>161-171 °C (Solvent naphtha, petroleum, light aromatic)</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&gt;42 °C (Solvent naphtha, petroleum, light aromatic)</td>
</tr>
<tr>
<td>OSHA Flammability Class:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density (air = 1):</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity (water = 1):</td>
<td>Not available</td>
</tr>
<tr>
<td>Log KOW:</td>
<td>Not available</td>
</tr>
<tr>
<td>KOC:</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available</td>
</tr>
<tr>
<td>Volatility:</td>
<td>Not available</td>
</tr>
<tr>
<td>Appearance:</td>
<td>paste</td>
</tr>
<tr>
<td>Physical Form:</td>
<td>paste</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not available</td>
</tr>
<tr>
<td>Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Water Solubility:</td>
<td>Negligible</td>
</tr>
<tr>
<td>Coeff. Water/Oil Dist:</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto Ignition:</td>
<td>Not available</td>
</tr>
<tr>
<td>VOC:</td>
<td>Not available</td>
</tr>
<tr>
<td>Molecular Formula:</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Section 10 - STABILITY AND REACTIVITY**

**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable at normal temperatures and pressure.

**Possibility of Hazardous Reactions**

Will not polymerize.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.
Incompatible Materials
- strong oxidizing materials

Hazardous Decomposition Products
Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Hazardous Decomposition
Combustion: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

* * *Section 11 - TOXICOLOGICAL INFORMATION* * *

Acute Toxicity
Component Analysis - LD50/LC50
The components of this material have been reviewed in various sources and the following selected endpoints are published:
- **Solvent naphtha, petroleum, light aromatic (64742-95-6)**
  - Oral LD50 Rat 8400 mg/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 3400 ppm 4 h
- **Titanium dioxide (13463-67-7)**
  - Oral LD50 Rat >10000 mg/kg
- **Chlorinated paraffin waxes and hydrocarbon waxes (63449-39-8)**
  - Oral LD50 Rat >21500 µL/kg
- **Carbon black (1333-86-4)**
  - Oral LD50 Rat >15400 mg/kg

Information on Likely Routes of Exposure
Inhalation
- May be harmful if inhaled.

Ingestion
- May be harmful if swallowed.

Skin Contact
- May cause irritation of the skin. May cause irritation, redness, itching and burning.

Eye Contact
- May cause irritation of the eyes. Contact may cause tearing, redness, a stinging or burning feeling, swelling, and blurred vision.

Immediate Effects
- skin irritation eye irritation

Delayed Effects
- No information is available.

Medical Conditions Aggravated by Exposure
- skin disorders, eye disorders

Irritation/Corrosivity Data
- Causes skin, eye and respiratory irritation.

Respiratory Sensitization
- No information available for the product.

Dermal Sensitization
- No information available for the product.

Germ Cell Mutagenicity
- No information available for the product.
Carcinogenicity
Results of a DuPont epidemiology study showed that employees who had been exposed to titanium dioxide pigments were at no greater risk of developing lung cancer than were employees who had not been exposed to titanium dioxide pigments. No pulmonary fibrosis was found in any of the employees and no associations were observed between titanium dioxide pigment exposure and chronic respiratory disease or lung abnormalities. Based on the results of this study, DuPont concluded that titanium dioxide pigment will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the workplace.

Component Carcinogenicity
Titanium dioxide (13463-67-7)
- ACGIH: A4 - Not Classifiable as a Human Carcinogen
- IARC: Monograph 93 [2010]; Monograph 47 [1989] (Group 2B (possibly carcinogenic to humans))
- DFG: Category 3A (could be carcinogenic for man, inhalable fraction with the exception of ultra small particles)
- OSHA: Present

Chlorinated paraffin waxes and hydrocarbon waxes (63449-39-8)
- IARC: Monograph 48 [1990] (Group 2B (possibly carcinogenic to humans))
- DFG: Category 3B (could be carcinogenic for man)
- OSHA: Present

Magnesium oxide (MgO) (1309-48-4)
- ACGIH: A4 - Not Classifiable as a Human Carcinogen

Carbon black (1333-86-4)
- ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
- IARC: Monograph 93 [2010]; Monograph 65 [1996] (Group 2B (possibly carcinogenic to humans))
- DFG: Category 3B (could be carcinogenic for man, inhalable fraction)
- OSHA: Present

Reproductive Toxicity
No information available for the product.

Specific Target Organ Toxicity - Single Exposure
No target organs identified.

Specific Target Organ Toxicity - Repeated Exposure
No target organs identified.

Aspiration Hazard
No information available for the product.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Ecotoxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component Analysis - Aquatic Toxicity
Solvent naphtha, petroleum, light aromatic (64742-95-6)
- Fish: 96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L
- Invertebrate: 48 Hr EC50 Daphnia magna: 6.14 mg/L

Chlorinated paraffin waxes and hydrocarbon waxes (63449-39-8)
- Fish: 96 Hr LC50 Lepomis macrochirus: >300 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: >0.0109 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 94.5 - 271 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: >0.1 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]

Persistence and Degradability
No information available for the product.
**Section 13 - DISPOSAL CONSIDERATIONS**

**Disposal Methods**
Dispose in accordance with all applicable federal, state/regional and local laws and regulations.

**Disposal of Contaminated Packaging**
Dispose of properly. Recycle if possible.

**Component Waste Numbers**
The U.S. EPA has not published waste numbers for this product's components.

**Section 14 - TRANSPORT INFORMATION**

**US DOT Information**
- **Shipping Name:** Petroleum distillates, n.o.s.
- **UN/NA #:** UN1268  **Hazard Class:** 3  **Packing Group:** III
- **Required Label(s):** 3
- **Additional Info.:** Land Transportation: Combustible Liquid

For non-bulk shipments transported by motor vehicle or rail within the United States, this product would be reclassified as non-regulated.

**TDG Information**
- **Shipping Name:** Petroleum distillates, n.o.s.
- **UN #:** UN1268  **Hazard Class:** 3  **Packing Group:** III
- **Required Label(s):** 3

**Section 15 - REGULATORY INFORMATION**

**U.S. Federal Regulations**
None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

- **Acute Health:** Yes  **Chronic Health:** No  **Fire:** Yes  **Pressure:** No  **Reactive:** No

**U.S. State Regulations**
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td>1317-65-3</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Titanium dioxide (TiO2)</td>
<td>13463-67-7</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chlorinated paraffin waxes and hydrocarbon waxes</td>
<td>63449-39-8</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Magnesium oxide (MgO)</td>
<td>1309-48-4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.
Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>US</th>
<th>CA</th>
<th>EU</th>
<th>AU</th>
<th>PH</th>
<th>JP</th>
<th>KR</th>
<th>CN</th>
<th>NZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha, petroleum, light aromatic</td>
<td>64742-95-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>1317-65-3</td>
<td>Yes</td>
<td>NSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Titanium dioxide(</td>
<td>13463-67-7</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chlorinated paraffin waxes and hydrocarbon waxes</td>
<td>63449-39-8</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Magnesium oxide (MgO)</td>
<td>1309-48-4</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

** * *Section 16 - OTHER INFORMATION* * **

Summary of Changes
New SDS: 1.00

NFPA Ratings: Health: 2 Fire: 2 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information
The information contained herein is based on data considered accurate which has been obtained from other companies and organizations.

End of Sheet MAN-008