**** MATERIAL SAFETY DATA SHEET ****
Emergency Phone #: 1-800-424-9300
Information Phone#: (312)-581-1300

Latest Revision Date...02/18/93
Print Date..............02/18/93

CHAPCO 400 COVE BASE ADHESIVE

SECTION 1  HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HMI: 0 = MINIMAL; 1 = SLIGHT; 2 = MODERATE; 3 = SERIOUS; 4 = SEVERE
HEALTH HAZARD: 1
FIRE HAZARD: 0
REACTIVITY: 0
PERSONAL PROTECTION...: B; GLOVES, GOGGLES

SECTION 2  PRODUCT IDENTIFICATION

MANUFACTURER'S NAME: CHICAGO ADHESIVE PRODUCTS CO.
PRODUCT NAME OR NUMBER: 400
TRADE NAME OR CHEMICAL NAME: CHAPCO 400 COVE BASE ADHESIVE

SECTION 3  HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>CHEMICAL NAME(S)</th>
<th>CAS NUMBER</th>
<th>WT</th>
<th>ACGIH-TWA</th>
<th>TLV-STEL</th>
<th>PEL</th>
<th>SEC.313</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>107-21-1</td>
<td>2.0</td>
<td>50 PPM</td>
<td>N/A</td>
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<td>DMF</td>
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<tr>
<td>NON-HAZARDOUS CHEMICALS</td>
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<td>FILLER CLAY</td>
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<td>LATEX POLYMER</td>
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<td>20.0</td>
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<tr>
<td>HYDROCARBON RESIN</td>
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<td>12.0</td>
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<td>WATER</td>
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<tr>
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<td>MINERAL SPIRITS</td>
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</tbody>
</table>

SECTION 4  PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING/MELTING POINT &760 mm Hg...212 DEGREES F.

PH: 8.9 - 9.4
VAPOUR PRESSURE &620 C...N/A
VAPOUR DENSITY (Air = 1)...N/A
PERCENT VOLATILE BY WEIGHT (%)...N/A
SPECIFIC GRAVITY OR BULK DENSITY...1.47
SOLUBILITY IN WATER...DISPERSEABLE WHILE STILL WET
EVAPORATION RATE (Bu/C = 1)...N/A
APPEARANCE/ODOR...OFF-WHITE PASTE; MILD SWEET ODOR

SECTION 5  FIRE AND EXPLOSION HAZARD DATA

FLASH POINT °F (Test Method)...NON-FLAMMABLE
FLAMMABLE LIMITS:
LEL...N/A
UEL...N/A

EXTINGUISHING MEDIA...WILL NOT SUPPORT COMBUSTION
SPECIAL FIRE FIGHTING PROCEDURES...N/A
UNUSUAL FIRE & EXPLOSION HAZARDS...PRODUCT WILL NOT BURN BUT MAY SPATTER IF TEMPERATURE EXCEEDS BOILING POINT.

SECTION 6  REACTIVITY DATA

PRODUCT STABILITY...STABLE
Conditions to Avoid...NONE KNOWN
CHEMICAL INCOMPATIBILITY...OXIDIZING AGENTS
SECTION 6  REACTIVITY DATA
HAZARDOUS DECOMPOSITION PRODUCTS... OXIDES OF CARBON IF CO-BURNED WITH FLAMMABLE MATERIALS.
HAZARDOUS POLYMERIZATION.......... WILL NOT OCCUR
Conditions to Avoid.................... NONE KNOWN

SECTION 7  HEALTH HAZARD DATA * EFFECTS OF OVEREXPOSURE
ROUTES OF ENTRY:...................... INHALATION, INGESTION AND DIRECT DERMAL EXPOSURE.
HEALTH HAZARDS...................... INHALATION: ADVERSE HEALTH EFFECTS FROM VAPORS IN POORLY VENTILATED AREAS; MAY INCLUDE IRRITATION OF THE MUCOUS MEMBRANES OF THE NOSE, THROAT, RESPIRATORY TRACT AND SYMPTOMS OF HEADACHE AND NAUSEA.
CARCINOGENICITY...................... NO KNOWN EFFECTS
SIGNS AND SYMPTOMS OF EXPOSURE... NONE EXPECTED BUT EXCESSIVE INHALATION MAY CAUSE NAUSEA AND DIZZINESS.
ACUTE EFFECTS OF OVEREXPOSURE..... HEADACHES, DIZZINESS, EYE, NOSE, THROAT AND LUNG DISTRESS FROM VAPORS. EYE CONTACT CAN CAUSE SEVERE EYE IRRITATION, REDNESS, TEARING, BLURRED VISION; CAN CAUSE RESPIRATORY IRRITATION AND GASTRIC DISTURBANCE.
CHRONIC EFFECTS OF OVEREXPOSURE.. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION AND INFLAMMATION.
EMERGENCY/FIRST AID PROCEDURES.... SEVERE OVEREXPOSURE: REMOVE TO FRESH AIR. ADMINISTER ARTIFICIAL RESPIRATION OR OXYGEN. CALL PHYSICIAN IMMEDIATELY. EYES: FLUSH WITH WATER FOR FIFTEEN (15) MINUTES, LIFTING EYELIDS OCCASIONALLY. GET IMMEDIATE ATTENTION. SKIN: WASH WITH SOAP AND WATER. IF IRRITATION DEVELOPS OR PERSISTS, SEE PHYSICIAN IMMEDIATELY. INHALATION: SHOULD INHALATION PROBLEMS OCCUR, MOVE VICTIM TO FRESH AIR. AID IN BREATHING, IF NECESSARY, GET IMMEDIATE MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. CALL PHYSICIAN IMMEDIATELY.

SECTION 8  CONTROL MEASURES
RESPIRATORY PROTECTION............ NONE REQUIRED IF GOOD VENTILATION IS MAINTAINED.
VENTILATION.......................... LOCAL EXHAUST; USE WITH ADEQUATE VENTILATION. OPEN DOORS AND WINDOWS. UTILIZE OTHER MEANS TO ENSURE FRESH AIR ENTRY AND EXHAUST.
PROTECTIVE CLOTHING/GLOVES..... IMPERVIOUS GLOVES
EYE PROTECTION...................... SAFETY GOGGLES RECOMMENDED
OTHER PRECAUTIONS............... N/A
WORK/HYGIENIC PRACTICES......... AVOID PROLONGED OR REPEATED SKIN CONTACT, OR WEAR IMPERVIOUS PROTECTIVE CLOTHING. THOROUGH WASHING OF SKIN AFTER WORK AND BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. WASH CLOTHING AFTER USE

SECTION 9  PRECAUTIONS FOR SAFE HANDLING AND USE
SPILL OR LEAK PROCEDURES......... SCRAPE UP AND PLACE IN A CLOSED CONTAINER.
HAZARDOUS SUBSTANCE SUPERFUND.. N/A
WASTE DISPOSAL METHOD............. MATERIAL SHOULD BE LAND FILLED ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.
HAZARDOUS WASTE 40CFR261........ N/A
PRECAUTIONS IN HANDLING/STORING.. KEEP CONTAINER CLOSED AND STORE IN COOL PLACE. USE WITH ADEQUATE VENTILATION.
OTHER PRECAUTIONS.................. SUPPLY SUFFICIENT VENTILATION.

SECTION 10  SHIPPING DATA
D.O.T. PROPER SHIPPING NAME....... ADHESIVES
HAZARDOUS SUBSTANCE 49CFR CERCLA . N/A
HAZARD CODE......................... N/A
D.O.T. HAZARD CLASS................. N/A
D.O.T. LABELS REQUIRED............. N/A
D.O.T. PLACARDS REQUIRED........... N/A
POISON CONSTITUENT.................. N/A
BILL OF LADING DESCRIPTION........ ADHESIVES
CC NO............................ N/A
UN/NA CODE........................ UN-1133
CHEMICAL EMERGENCY................ CHEMTREC 24 HOUR: 1-800-424-9300
**** MATERIAL SAFETY DATA SHEET ****
Emergency Phone #: 1-800-424-9300
Information Phone#: (312)-581-1300

Latest Revision Date...07/20/92
Print Date..............07/20/92

SECTION 1 HAZARDOUS MATERIAL IDENTIFICATION SYSTEM
EMERGENCY: 0 = MINIMAL; 1 = SLIGHT; 2 = MODERATE; 3 = SERIOUS; 4 = SEVERE

PRODUCT IDENTIFICATION
MANUFACTURER'S NAME.............. CHICAGO ADEHESIVE PRODUCTS CO.
PRODUCT NAME OR NUMBER........... 750
TRADE NAME OR CHEMICAL NAME..... CHAPCO 750 CLEAR LATEX VCT ADHESIVE

SECTION 3 HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

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<tr>
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<th>CAS NUMBER</th>
<th>% WT</th>
<th>ACGIH-TWA</th>
<th>TLV-STEL</th>
<th>PEL</th>
<th>SEC.313</th>
</tr>
</thead>
<tbody>
<tr>
<td>VM6P</td>
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<tr>
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<td>107-21-1</td>
<td>1.5</td>
<td>50 PPM</td>
<td>N/A</td>
<td>50 PPM</td>
<td>Yes</td>
</tr>
</tbody>
</table>

SECTION 4 PHYSICAL/CHEMICAL CHARACTERISTICS
BOILING/MELTING POINT @760 mm Hg... 212 DEGREES F.
pH.................................. 8.5 TO 9.5
VAPOR PRESSURE @20° C.............. N/A
VAPOR DENSITY (Air = 1)............ N/A
PERCENT VOLATILE BY WEIGHT (%).... N/A
SPECIFIC GRAVITY OR BULK DENSITY.. 1.07
SOLUBILITY IN WATER............... DISPERSED WHILE STILL WET
EVAPORATION RATE (BuAc = 1)....... N/A
APPEARANCE/odor.................. BUFF COLOR - SWEET ODOR

SECTION 5 FIRE AND EXPLOSION HAZARD DATA
FLASH POINT °F (Test Method)........ NON-FLAMMABLE
FLAMMABLE LIMITS.................. N/A
LEL............................... N/A
UEL............................... N/A
EXTINGUISHING MEDIA............... WILL NOT SUPPORT COMBUSTION
SPECIAL FIRE FIGHTING PROCEDURES... NONE KNOWN
UNUSUAL FIRE & EXPLOSION HAZARDS.. PRODUCT WILL NOT BURN BUT MAY SPATTER IF TEMPERATURE EXCEEDS BOILING POINT.

SECTION 6 REACTIVITY DATA
PRODUCT STABILITY.................. STABLE
Conditions to Avoid................ NONE KNOWN
CHEMICAL INCOMPATIBILITY............ OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION PRODUCTS. THERMAL DECOMPOSITION MAY FORM CARBON MONOXIDE
HAZARDOUS POLYMERIZATION........... WILL NOT OCCUR
Conditions to Avoid................ NONE KNOWN

SECTION 7 HEALTH HAZARD DATA * EFFECTS OF OVEREXPOSURE
ROUTES OF ENTRY.................... INHALATION, INGESTION AND DIRECT DERMAL EXPOSURE
HEALTH HAZARDS.................... INHALATION: ADVERSE HEALTH EFFECTS FROM VAPORS IN POORLY VENTILATED AREAS; MAY INCLUDE IRRITATION OF THE MUCOUS MEMBRANES OF THE NOSE, THROAT, RESPIRATORY TRACT AND SYMPTOMS OF TACHYPIA AND NAUSEA.
SECTION 7  HEALTH HAZARD DATA * EFFECTS OF OVEREXPOSURE

Carcinogenicity: No known effects.

Signs and Symptoms of Exposure: None expected but excessive inhalation may cause nausea and dizziness.

Acute Effects of Overexposure: Headaches, dizziness, eye, nose, throat and lung distress from vapors. Eye contact can cause severe eye irritation, redness, tearing, blurred vision; can cause respiratory irritation and gastric disturbance.

Chronic Effects of Overexposure: Prolonged or repeated skin contact may cause irritation and inflammation.

Emergency/First Aid Procedures: Severe overexposure: Remove to fresh air. Administer artificial respiration or oxygen. Call physician immediately. Eyes: Flush with water for fifteen (15) minutes, lifting eyelids occasionally. Get immediate attention. Skin: Wash with soap and water. If irritation develops or persists, see physician immediately. Inhalation: Should inhalation problems occur, move victim to fresh air. Aid in breathing, if necessary, get immediate medical attention. Ingestion: Do not induce vomiting. Call physician immediately.

SECTION 8  CONTROL MEASURES

Respiratory Protection: None required.

Ventilation: Local exhaust; use with adequate ventilation. Open doors and windows. Utilize other means to ensure fresh air entry and exhaust.

Protective Clothing/Gloves: Recommended.

Eye Protection: Safety goggles recommended.

Other Precautions: N/A.

Work/Hygienic Practices: Avoid prolonged or repeated skin contact, or wear impervious protective clothing. Thorough washing of skin after work and before eating, drinking, smoking or using toilet facilities. Wash clothing after use.

SECTION 9  PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures: Scrape up excess. Clean with soapy water.

Hazardous Substance Superfund: N/A.

Waste Disposal Method: Incinerate under safe conditions or in accordance with local, state and federal regulations.

Hazardous Waste 40CFR261: N/A.

Precautions in Handling/Storage: Store in original sealed containers at temperature not over 100 degrees F.

Other Precautions: Supply sufficient ventilation.

SECTION 10  SHIPPING DATA

D.O.T. Proper Shipping Name: Adhesives

Hazardous Substance 49CFR CERCLA: N/A

Hazard Code: N/A

D.O.T. Hazard Class: N/A

D.O.T. Labels Required: N/A

D.O.T. Placards Required: N/A

Poison Constituent: N/A

Bill of Lading Description: Adhesives

CC No.: N/A

UN/NA Code: UN-1133

Chemical Emergency: Chemtrec 24 Hour: 1-800-424-9300