MATERIAL SAFETY DATA SHEET

TITAN INDUSTRIAL CHEMICALS LLC. GROVER, MO 63040 EMERGENCY# 877-273-9030

EFFECTIVE DATE:03-10-08

PRODUCT CODE:411

PRODUCT NAME: "EXTRACT"

MSD: 411-1

HAZARDOUS INGREDIENTS (TYPICAL VALUES - NOT SPECIFICATION)

SODIUM METASILICATE; CAS# 6834-92-0; ACGIH TWA 2MG/M3 C; OSHA TLV N/E

2-BUTOXYETHANOL, CAS# 111-76-2; ACGIH TWA 25ppm; OSHA TWA 25ppm.

ALL OTHER INGREDIENTS ARE PROPRIETARY INFORMATION AND DO NOT CONTRIBUTE TO ANY HAZARDOUS CONDITIONS.

Section 1

Boiling Point: 250 deg. F

<u>Physical Data</u>

Sol. In Water: COMPLETE

Vap. Press. (mmHg @ 25°C):NA Vap. Density (Air = 1):NA Sp. Gravity (@25/25°C):1.023

% Volatile by Volume:90.0% incldg. H2O

pH:12.9 (CON.); 10.9 (1% SOL'N) EVAP.RATE (B-ACETATE=1): <1

Appearance and Odor: CLEAR, AMBER LIQUID. WATER-LIKE VISCOSITY. ETHEREAL ODOR.

Section 2 Flash Point: NONE Fire and Explosion Hazard Data

Flammable Limits:

Method Used: TCC

LFL (% Vol): NA

UFL (% Vol):NA

Extinguishing Media: USE MEDIA SUITABLE FOR SURROUNDING FIRE.

Special Fire Fighting Equipment and Hazards: NONE KNOWN. IF LARGE AMOUNT IS INVOLVED IN FIRE USE NIOSH APPROVED SELF CONTAINED BREATHING APPARATUS OPERATED IN POSITIVE PRESSURE MODE.

Section 3

Reactivity Data

Stability:STABLE

Incompatibility: STRONG ACIDS AND OXIDIZERS.

Hazardous Decomposition Products: CARBON DIOXIDE, CARBON MONOXIDE WHEN EXPOSED TO EXTREMELY HIGH TEMPERATURES.

Hazardous Polymerization: WILL NOT OCCUR.

Section 4

Spill, Leakage, and Disposal Procedures

Action to be taken for Spills (Use Appropriate Safety Equipment): FLUSH WITH LARGE AMOUNTS OF WATER.

Disposal Method: CONSULT FEDERAL, STATE AND LOCAL REGULATIONS.

Section 5

Health Hazard Data -- Effect of Overexposure

Ingestion: MAY CAUSE MODERATE TO SEVERE GASTROINTESTINAL IRRITATION DEPENDING UPON AMOUNT INGESTED.

Eye Contact: MAY CAUSE MODERATE EYE IRRITATION AND IRRITATION OF SURROUNDING TISSUE.

Skin Contact: MAY CAUSE MODERATE SKIN IRRITATION, REDNESS, DRYNESS, ITCHING.

Skin Absorption: WILL NOT OCCUR.

Inhalation: EXCESSIVE INHALATION MAY CAUSE NAUSEA, DIZZINESS.

Section 6

First Aid

Eyes:FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING UPPER AND LOWER LIDS OPEN. GET MEDICAL ATTENTION.

Skin: FLUSH WITH LARGE AMOUNT OF WATER. APPLY MOISTURIZING SKIN LOTION, IF IRRITATION IS EVIDENT GET MEDICAL ATTENTION.

Inhalation: REMOVE PERSON TO FRESH AIR. IF BREATHING IS DIFFICULT ADMINISTER OXYGEN. GET MEDICAL ATTENTION.

<u>Ingestion:</u>DRINK 2 GLASSES OF WATER OR MILK AND INDUCE VOMITING BY TOUCHING FINGER TO BACK OF THROAT. KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF MATERIAL INTO LUNGS. GET MEDICAL ATTENTION.

SUPPLEMENTAL HEALTH INFORMATION

ACUTE TOXICITY DATA

Eyes:

Skin: 2-BE LD50 .4G/KG (RABBIT); SODIUM METASILICATE 250 MG/24 HR.

Respiratory: 2-BE 450ppm (RAT);

Oral: 2-BE LD(50) .5-3.0 G/KG; SODIUM METASILICATE LD(50) 1470 MG/KG.

CARCINOGENICITY: NTP:NO

IARC:NO

OSHA REGULATED;2-BE;
Special Handling Information

Section 7
Ventilation: NORMAL ROOM VENTILATION IS ADEQUATE.

Respiratory Protection: NONE REQUIRED FOR NORMAL USE.

Protective Clothing: WEAR CHEMICAL-RESISTANT GLOVES.

Eye Protection: SAFETY GLASSES OR CHEMICAL SPLASH GOGGLES.

Section 8

Special Precautions and Additional Information

Precautions to be Taken in Handling and Storage: TREAT EMPTY CONTAINERS AS IF THEY WERE FULL DUE TO PRESENCE OF PRODUCT RESIDUE.

Additional Information: HMIS..2,0,0,B

SECTION 9 D.O.T. SHIPPING INFORMATION

PROPER SHIPPING NAME:LIQUID CLEANING COMPOUND

HAZARD CLASS:NONE

LABEL REQUIREMENTS: NONE

ID NO.:NONE

EMERGENCY RESPONSE GUIDE NO.: NONE

SECTION 10 ENVIRONMENTAL INFORMATION

RCRA WASTE NO.:NONE

REPORTABLE QUANTITY: NONE

NFPA:2,0,0

THRESHOLD PLANNING QUANTITY: NONE

SARA TITLE III, SEC 313:2-BUTOXYETHANOL

CONSULT TITAN INDUSTRIAL CHEMICALS LLC. FOR FURTHER INFORMATION.

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