MATERIAL SAFETY DATA SHEET

May be used to comply with OSHA's Hazard Communication Standard,

29CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor OCCUPATIONAL SAFETY AND

HEALTH ADMINISTRATION

SIMILAR TO FORM OSHA 174

IDENTITY (As Used on Label and List) ACUTE HEALTH FIRE REACTIVITY OIL-FLO™ SAFETY SOLVENT CLEANER **NFPA** 2 0 1 LEAST 1 = SLIGHT 2 = MODERATE 3 = HIGH 4 = EXTREME Section 1 MANUFACTURER'S NAME EMERGENCY TELEPHONE NUMBER **TITAN LABORATORIES** SEE BELOW OR 800-255-3924 EMERGENCY ONLY **ADDRESS** TELEPHONE NUMBER FOR INFORMATION 2235 MORA DRIVE 650-965-9900, 800-475-3300 FAX 650.964.4400 **MOUNTAIN VIEW, CA 94040** DATE PREPARED August 24, 2011 V7.9 Section II --- Hazardous Ingredients/Identify Information HAZARDOUS COMPONENTS (Specific Chemical Identity; Common Name(s) OSHA PEL ACGIH TLV OTHER LIMITS % (OPTIONAL) 1. AROMATIC HYDROCARBONS **200 PPM** >20% CAS# 64742-96-6 2. GLYCOL ETHER EB **50 PPM** 1 to 4% CAS # 111-76-2

CONTAINS OTHER INGREDIENTS NOT IDENTIFIED AS HAZARDOUS WITHIN OSHA'S HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200. CONTAINS NO BENZENE, CHLORINATED HYDROCARBONS OR CFC's.

BOILING POINT 290°F	SPECIFIC GRAVITY (H ₂ O = 1) 0.93
VAPOR PRESSURE (MM HG) 0.078 mm Hg	@ 25°C MELTING POINT NOT APPLICABLE
VAPOR DENSITY (AIR = 1) >3.4	EVAPORATION RATE 0.01 (N-Butyl Acetate = 1)
SOLUBILITY IN WATER COMPLETE	pH: (H ₂ O = 7) 7.8
APPEARANCE AND ODOR COLORLESS TO AME	BER LIQUID, SOLVENT ODOR WITH ODOR MASK.

130°F, PMCC LFL 1.1% UEL 8.6% FLASH POINT (METHOD USED) FLAMMABLE LIMITS FOAM. CARBON DIOXIDE OR DRY CHEMICALS **EXTINGUISHING MEDIA**

WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL SPECIAL FIRE FIGHTING PROCEDURES FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE. NORMAL COMBUSTION CAUSES CO2 AND WATER VAPOR. INCOMPLETE COMBUSTION CAN FORM CO.

DO NOT WELD ON OR NEAR DRUMS EVEN IF EMPTY. VAPORS ARE UNUSUAL FIRE AND EXPLOSION HAZARDS HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND TO A PILOT LIGHT OR OTHER FLAME AT A DISTANT LOCATION.

Section V --- Reactivity Data

[OIL-FLO MSDS PG.2 V7.9

STABILITY: **STABLE**

INCOMPATIBILITY Materials to Avoid)

STRONG OXIDIZING AGENTS HYPOCHLORITES, CHLORINE

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

NORMAL COMBUSTION, CARBON DIOXIDE AND WATER VAPOR.

INCOMPLETE COMBUSTION, CARBON MONOXIDE AND TOXIC MATERIALS

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

Section VI --- Health Hazard Data

ROUTE(S) OF ENTRY:` INHALATION?

SKIN? INGESTION?

YES YES YES YES

HEALTH HAZARDS (Acute and Chronic) PROLONGED INHALATION OF VAPORS: NAUSEA, DROWSINESS• LIGHTHEADNESS (NARCOSIS), SKIN: LOCAL IRRITATION, DRYNESS, CHAPPING OR DERMATITIS • INGESTION; DIARRHEA, NAUSEA, CRAMPS. UNCONSCIOUSNESS AND DEATH IN EXTREME CASES. • EYES: IRRITATION

CARCINOGENICITY:

NTP?

IARC MONOGRAPHS?

OSHA REGULATED?

NONE KNOWN

NONE

NO

SIGNS AND SYMPTOMS OF EXPOSURE

SEE "HEALTH HAZARDS"

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

POSSIBLY PRE-EXISTING SKIN OR RESPIRATORY DISORDERS

EMERGENCY AND FIRST AID PROCEDURES

<u>INHALATION</u>: REMOVE TO FRESH AIR • <u>SKIN</u>: FLUSH COMPLETELY WITH WATER. • <u>INGESTION</u>: RINSE MOUTH. DO NOT INDUCE VOMITING. IF VOMITING OCCURS, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION TO LUNGS. GET MEDICAL HELP. • <u>EYES</u>: FLOOD WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. REMOVE CONTACT LENSES IF WORN. GET MEDICAL HELP.

Section VII --- Precautions for Safe Handling and Use

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED ABSORB WITH SAND, DIATOMACEOUS EARTH, RICE HULL ASH, OR OTHER ABSORBENT MATERIAL. OR DILUTE WITH WATER TO ACCEPTABLE WASTE WATER RATIO, OR CONTAIN WITH TEMPORARY DAM AND COLLECT SPILL FOR REUSE. TURNS MILKY WHITE WHEN MIXED WITH WATER.

WASTE DISPOSAL METHOD <u>SMALL SPILL</u>: ABSORB AS ABOVE OR RINSE WITH WATER. <u>LARGE SPILL</u>: OBSERVE WASTE WATER STANDARDS, DISPOSE OF WASTE PROPERLY.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING AVOID SPARKS AND OPEN FLAME.

OTHER PRECAUTIONS

KEEP CONTAINERS CLOSED WHEN NOT IN USE. KEEP AWAY FROM VEGETATION UNLESS WELL DILUTED. DO NOT TRANSFER INTO UNMARKED CONTAINERS.

Section VIII --- Control Measures

RESPIRATORY PROTECTION (Specify Type) IF CONCENTRATION OF VAPORS EXCEEDS TLV LIMITS, INCREASE VENTILATION OR USE RESPIRATOR.

VENTILATION

LOCAL EXHAUST

IF NEEDED. ADEQUATE VENTILATION REQUIRED.

PROTECTIVE GLOVES

NITRILE OR NEOPRENE

EYE PROTECTION IF EXPOSED TO SPLASHING

OTHER PROTECTIVE CLOTHING OR EQUIPMENT IMPERVIOUS CLOTHING OR BOOTS

WORK/HYGIENIC PRACTICES

WASH THOROUGHLY AFTER HANDLING, UNDER RINGS AND WATCHBANDS ALSO.

TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101. DOT Description: NON-REGULATED BY D.O.T. Container/Mode: 55 GAL

DRUM/TRUCK PACKAGE. ALSO 5-GAL PAILS, GALLON JUGS, PINTS. NOS Component: AROMATIC PETROLEUM

DISTILLATES. RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity Component

10,149 Lbs XYLENES (O-,M-, P- ISOMERS)

46,296 Lbs DIETHANOLAMINE