

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) **NFPA** ACUTE HEALTH FIRE REACTIVITY
OIL-FLO™ 141 **1** **1** **0**
SAFETY SOLVENT CLEANER 0=LEAST 1=SLIGHT 2=MODERATE 3=HIGH 4=EXTREME

SECTION 1

MANUFACTURER'S NAME TITAN LABORATORIES	EMERGENCY TELEPHONE NUMBER SEE BELOW OR 800-255-3924 EMERGENCY ONLY
ADDRESS 1071 WRIGHT AVE. MOUNTAIN VIEW, CA 94043	TELEPHONE NUMBER FOR INFORMATION 650-965-9900 OR 800-475-3300
	DATE PREPARED March 21, 2007 V2.53

SECTION 2 --- HAZARDOUS INGREDIENTS/IDENTIFY INFORMATION

HAZARDOUS COMPONENTS (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	% (optional)
ALIPHATIC PETROLEUM DISTILLATES CAS # 64742-96-7	588PPM		>20%
GLYCOL ETHER E-B CAS # 111-76-2	50PPM		1 to 4%

CONTAINS NO BENZENE, CHLORINATED HYDROCARBONS OR CFC's.
NOT PHOTOCHEMICALLY REACTIVE. BIODEGRADABLE. USDA APPROVED.

SECTION 3 --- PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 370° - 550°F	SPECIFIC GRAVITY (H ₂ O = 1) 0.834
VAPOR PRESSURE (MM HG): <1 mm Hg @ 25°F	MELTING POINT: N/A VOC (see section 9)
VAPOR DENSITY (AIR = 1): >5	EVAPORATION RATE: < 0.10
SOLUBILITY IN WATER: 100% COMPLETE	(N-Butyl Acetate = 1)
APPEARANCE AND ODOR: COLORLESS TO AMBER LIQUID, LOW FRUITY ODOR	pH: 7.0

SECTION 4 --- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) 160° F T.C.C.	FLAMMABLE LIMITS	LEL 0.6	UEL 7
EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE OR DRY CHEMICALS			

SPECIAL FIRE FIGHTING PROCEDURES **WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE.**

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

SECTION 5 --- REACTIVITY DATA

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 6 --- HEALTH HAZARD DATA

ROUTE(S) OF ENTRY:	INHALATION? YES	SKIN? YES	INGESTION? YES
HEALTH HAZARDS (Acute and Chronic)	PROLONGED INHALATION OF VAPORS: NAUSEA, DROWSINESS • SKIN: LOCAL IRRITATION, DRYNESS, CHAPPING OR DERMATITIS • INGESTION: DIARRHEA, NAUSEA, CRAMPS. UNCONSCIOUSNESS. DEATH IN EXTREME CASES. • EYES: IRRITATION		
CARCINOGENICITY:	NTP? NONE KNOWN	IARC MONOGRAPHS? NONE	OSHA REGULATED? 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: **INHALATION: REMOVE TO FRESH AIR • SKIN: FLUSH WITH WATER. • INGESTION: RINSE MOUTH. DO NOT INDUCE VOMITING. IF VOMITING OCCURS, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION TO LUNGS. GET MEDICAL HELP. • EYES: FLOOD WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. REMOVE CONTACT LENSES IF WORN. GET MEDICAL HELP.**

SECTION 7 --- 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 **SMALL SPILL: ABSORB AS ABOVE OR RINSE WITH WATER. LARGE SPILL: 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 8 --- CONTROL MEASURES

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

VENTILATION LOCAL EXHAUST **IF NEEDED**

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.

SECTION 9 --- ENVIRONMENTAL AND TRANSPORT INFORMATION

VOC CONTENT: **733 g/L (6.12 Lbs/Gal)**

***Meets the definition of a Low Vapor Pressure Solvent under the California Air Resource Board (CARB) consumer product guidelines.**

Meets or exceeds federal specification V V-K-220.

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: **ALIPHATIC PETROLEUM DISTILLATES.**

RQ (Reportable Quantity) - 49 CFR 172.101: None or not possible in one non-bulk package