

**TORCO RACING FUELS**  
**MATERIAL SAFETY DATA SHEET-T.N.T. UPPER LUBE**  
**EFFECTIVE DATE 1-3-2005**

**I. IDENTIFICATION**

PRODUCT NAME: T.N.T. UPPER LUBE  
PRODUCT CATEGORY: METHANOL FUEL UPPER LUBE  
SYNONYMS: NOT AVAILABLE

**EMERGENCY CONTACT: CHEMTEC**  
**EMERGENCY NUMBER: 1-800-424-9300**

**II. PHYSICAL DATA (DETERMINED ON TYPICAL MATERIAL)**

BOILING POINT, 760 mm Hg: DECOMPOSES >200 DEGREES C (>392 DEGREES F)  
SPECIFIC GRAVITY (H<sub>2</sub>O=1): 1.127 AT 20/20 DEGREES C  
FREEZING POINT: 4 DEGREES TO 8 DEGREES C (39 TO 46 DEGREES F)  
VAPOR PRESSURE AT 20 DEGREES C: <0.01 mmHg  
EVAPORATION RATE (BUTYL ACETATE=1): 0.01  
VAPOR DENSITY (AIR=1): >10  
SOLUBILITY IN WATER by wt: 100% AT 20 DEGREES C  
APPEARANCE: TRANSPARENT COLORLESS ABOVE FREEZING/MELTING  
POINT-OPAQUE WHITE BELOW FREEZING/MELTING POINT.  
ODOR: MILD  
PHYSICAL STATE: LIQUID ABOVE FREEZING/MELTING POINT-SOLID BELOW FREEZING/MELTING POINT  
PERCENT VOLATILES (by weight): 0.3  
FLASH POINT (test method A): 440degrees F (227degC)PENSKEY-MARTENS CLOSED  
CUP ASTM D 93. 505 degrees F (263deg C) CLEVELAND OPEN CUP ASTM D 92  
FLAMMABLE LIMITS IN AIR % by volume: LOWER-NOT DETERMINED/ UPPER-NOT DETERMINED  
SPECIAL FIRE FIGHTING PROCEDURES: DO NOT DIRECT A SOLID STREAM OF WATER OR FOAM  
INTO HOT, BURNING POOLS: THIS MAY CAUSE FROTHING AND INCREASE FIRE INTENSITY.  
USE SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.  
EXTINGUISHING MEDIA: APPLY ALCOHOL-TYPE OR ALL-PURPOSE-TYPE FOAM BY MANUFACTURER'S  
RECOMMENDED TECHNIQUES FOR LARGE FIRES. USE CARBON DIOXIDE OR DRY CHEMICAL  
MEDIA FOR SMALL FIRES.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: SEE "OTHER PRECAUTIONS" IN SECTION IX.

**III. HEALTH HAZARD DATA**

**EXPOSURE OF SINGLE OVEREXPOSURE:**

SWALLOWING: NO EVIDENCE OF HARMFUL EFFECTS FROM AVAILABLE INFORMATION.  
SKIN ABSORPTION: NO EVIDENCE OF HARMFUL EFFECTS FROM AVAILABLE INFO.  
INHALATION: SHORT TERM HARMFUL HEALTH EFFECTS ARE NOT EXPECTED FROM  
VAPOR GENERATED AT AMBIENT TEMPERATURE.  
EYE CONTACT: NO EVIDENCE OF HARMFUL EFFECTS FROM AVAILABLE INFORMATION.

**EFFECTS OF REPEATED OVEREXPOSURE:**

ALTHOUGH THIS MATERIAL IS NOT A SKIN IRRITANT, SUBMERSION BY WORKERS OF  
UNPROTECTED SKIN IN HIGHLY CONCENTRATED SOLUTIONS OF THIS MATERIAL FOR PROLONGED  
PERIODS OF TIME COULD RESULT IN SKIN DEHYDRATION.

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:**

A KNOWLEDGE OF THE AVAILABLE TOXICOLOGY INFORMATION AND OF THE PHYSICAL AND  
CHEMICAL PROPERTIES OF THE MATERIAL SUGGESTS THAT OVEREXPOSURE IS UNLIKELY TO AGGRAVATE  
EXISTING MEDICAL CONDITIONS.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:  
RATS TREATED ORALLY WITH HIGH DOSAGES OF TNT UPPER LUBE FOR 90 DAYS HAD DIARRHEA, AND  
INCREASED ACIDITY AND OSMOLALITY (SOLUTE CONCENTRATION) IN THE URINE. THESE EFFECTS  
WERE FULLY REVERSIBLE FOLLOWING A RECOVERY PERIOD. THERE WAS NO TREATMENT RELATED GROSS  
LESION IN ANY ORGAN.

**OTHER EFFECTS OF OVEREXPOSURE:**

OVEREXPOSURE TO VAPOR GENERATED AT HIGH TEMPERATURES MAY RESULT IN EYE AND  
RESPIRATORY TRACT IRRITATION, DIZZINESS, NAUSEA, AND THE INHALATION OF HARMFUL AMOUNTS OF  
MATERIAL

**EMERGENCY AND FIRST AID PROCEDURES:**

SWALLOWING: NO EMERGENCY CARE ANTICIPATED  
SKIN: WASH SKIN WITH SOAP AND WATER.

INHALATION; NO EMERGENCY CARE ANTICIPATED.

NOTES TO PHYSICIAN:

TOXICOLOGY STUDIES HAVE SHOWN THIS OR SIMILAR MATERIAL TO BE OF VERY LOW ACUTE TOXICITY AND NONIRRITATING. THERE IS NO SPECIFIC ANTIDOTE. TREATMENTS OF OVEREXPOSURE SHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITION OF THE PATIENT.

#### IV. REACTIVITY DATA

STABILITY: STABLE  
CONDITIONS TO AVOID: NONE KNOWN

INCOMPATIBILITY (MATERIALS TO AVOID):

NORMALLY UNREACTIVE, HOWEVER, AVOID STRONG BASES AT HIGH TEMPERATURES, STRONG ACIDS, STRONG OXIDIZING AGENTS AND MATERIALS REACTIVE WITH HYDROXYL COMPOUNDS.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

BURNING CAN PRODUCE THE FOLLOWING PRODUCTS. CARBON MONOXIDE AND/OR CARBON DIOXIDE. CARBON MONOXIDE IS HIGHLY TOXIC IF INHALED; CARBON DIOXIDE INSUFFICIENT CONCENTRATIONS CAN ACT AS AN ASPHYXANT. THERMAL DECOMPOSITION MAY PRODUCE ALDEHYDES. ACUTE OVEREXPOSURE TO ALDEHYDES MAY RESULT IN IRRITATION OF THE EYES, SKIN AND RESPIRATORY TRACT. IN ADDITION, SOME ALDEHYDES ARE SKIN SENSITIZERS AND OR PROBABLE CARCINOGENS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: NONE KNOWN

#### VI. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

SMALL SPILLS CAN BE FLUSHED WITH LARGE AMOUNTS OF WATER; LARGER SPILLS SHOULD BE COLLECTED FOR DISPOSAL. WASTE DISPOSAL METHOD; AT VERY LOW CONCENTRATIONS IN WATER, THIS PRODUCT IS BIODEGRADABLE IN A BIOLOGICAL WASTEWATER TREATMENT PLANT. INCINERATE IN A FURNACE WHERE PERMITTED UNDER FEDERAL, STATE AND LOCAL REGULATIONS.

#### VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type): NONE EXPECTED TO BE NEEDED.

VENTILATION: GENERAL (MECHANICAL) ROOM VENTILATION IS EXPECTED TO BE SATISFACTORY.

PROTECTIVE GLOVES: PVC-COATED

EYE PROTECTION: SAFETY GLASSES OR MONOGOGGLES

OTHER PROTECTIVE EQUIPMENT: EYE BATH, SAFETY SHOWER

#### VIII. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

ATTENTION! USE PRODUCT PROMPTLY AFTER OPENING. AVOID PROLONGED EXPOSURE TO HEAT AND AIR. FOR INDUSTRY USE ONLY.

OTHER PRECAUTIONS:

THIS PRODUCT MAY CONTAIN TRACE AMOUNTS OF ETHYLENE OXIDE (CAS# 75-21-8), A CONDITION WHICH CREATES THE POTENTIAL FOR ACCUMULATION OF ETHYLENE OXIDE IN THE HEAD SPACE OF SHIPPING AND STORAGE CONTAINERS AND IN ENCLOSED AREAS WHERE THE PRODUCT IS BEING HANDLED OR USED. ETHYLENE OXIDE IS LISTED BY OSHA AS PROBABLY CARCINOGENIC TO HUMANS. IARC AS CARCINOGENIC TO HUMANS. AND NTP AS REASONABLE ANTICIPATED TO BE CARCINOGENIC. OSHA CONSIDERS THAT, AT EXCESSIVE LEVELS, ETHYLENE OXIDE MAY PRESENT REPRODUCTIVE, MUTAGENIC, GENOTOXIC, NEUROLOGIC AND SENSITIZATION HAZARDS. IF THIS PRODUCT IS HANDLED WITH ADEQUATE VENTILATION, THE PRESENCE OF THESE TRACE AMOUNTS IS NOT EXPECTED TO RESULT IN ANY SHORT OF LONG TERM HAZARD. THIS PRODUCT MAY NOT BE EXEMPT FROM OSHA'S ETHYLENE OXIDE STANDARD, 29CFR 1910.1047. USERS SHOULD COMPLY WITH ALL APPLICABLE PROVISIONS, PERSONNEL SHOULD BE MONITORED TO DETERMINE LEVELS OF EXPOSURE TO ETHYLENE OXIDE. IF NECESSARY, PROTECTIVE MEASURES SHOULD BE TAKEN. THE OSHA PERMISSIBLE EXPOSURE LIMIT FOR ETHYLENE OXIDE IS 1 ppm TWA8, THE ACTION LEVEL IS 0.5 ppm TWA8, THE ACGIH TLV IS 1 ppm TWA8 AND OSHA HAS ESTABLISHED AN EXCURSION LIMIT OF 5 ppm (15 MINUTE AVERAGE).

PROCESS HAZARD:

SUDDEN RELEASE OF HOT ORGANIC CHEMICAL VAPORS OR MISTS FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE AND PRESSURE, OR SUDDEN INGRESS OF AIR INTO VACUUM EQUIPMENT, MAY RESULT IN IGNITIONS WITHOUT THE PRESENCE OF OBVIOUS IGNITION SOURCES. PUBLISHED "AUTOIGNITION" OR "IGNITION" TEMPERATURE VALUES

CANNOT BE TREATED AS SAFE OPERATING TEMPERATURES IN CHEMICAL PROCESSES WITHOUT ANALYSIS OF THE ACTUAL PROCESS CONDITIONS. ANY USE OF THIS PRODUCT IN ELEVATED TEMPERATURE PROCESSES SHOULD BE THOROUGHLY EVALUATED TO ESTABLISH AND MAINTAIN SAFE OPERATING CONDITIONS. FURTHER "IGNITION HAZARDS OF ORGANIC CHEMICAL VAPORS."

#### IX. REGULATORY INFORMATION

STATUS ON SUBSTANCE LISTS:

THE CONCENTRATIONS SHOWN ARE MAXIMUM OR CEILING LEVELS (weight %) TO BE USED FOR CALCULATIONS FOR REGULATIONS. TRADE SECRETS ARE INDICATED BY "TS". FEDERAL EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION, AND LIABILITY ACT OF 1980 (CERCLA) REQUIRES NOTIFICATION OF THE NATIONAL RESPONSE CENTER OF RELEASE OF QUANTITIES OF HAZARDOUS SUBSTANCES EQUAL TO OR GREATER THAN THE REPORTABLE QUANTITIES (RQs) IN 40 CFR 302.4. COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL WHICH COULD REQUIRE

REPORTING UNDER THE STATUTE ARE:		UPPER BOUND
CHEMICAL	CAS NUMBER	CONCENTRATION %
ACETALDEHYDE	75-07-0	.0006
ETHYLENE OXIDE	75-21-8	.0005
DIOXANE	123-91-1	.0005
FORMALDEHYDE	50-00-0	.0004

SUPERFUND AMENDMENTS AND REAUTHORIZATIONS ACT OF 1986 (SARA) TITLE III REQUIRES EMERGENCY PLANNING BASED ON THRESHOLD PLANNING QUANTITIES (TPQs) AND RELEASE REPORTING BASED ON REPORTABLE QUANTITIES (RQs) IN 40 CFR 355 (USED FOR SARA 302, 304, 311, AND 312). COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL WHICH COULD REQUIRE REPORTING UNDER THE STATUS ARE: \*\*\*NONE\*\*\*

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS: THE INGREDIENTS OF THIS PRODUCT ARE ON THE TSCA INVENTORY.

STATE RIGHT- TO- KNOW CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS TRACE LEVELS OF ETHYLENE OXIDE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM, AND TRACE LEVELS OF ACETALDEHYDE, 1,4-DIOXANE AND FORMALDEHYDE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. SEE MASSACHUSETTS LISTING FOR AMOUNTS. MASSACHUSETTS RIGHT-TO-KNOW, SUBSTANCE LIST (MSL) HAZARDOUS SUBSTANCES AND EXTRAORDINARY HAZARDOUS SUBSTANCES ON THE MSL MUST BE IDENTIFIED WHEN PRESENT IN PRODUCTS. COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL WHICH COULD REQUIRE REPORTING UNDER THE STATUTE.

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