

FEDERAL SPECIFICATIONS -- TOLUENE -- 6810-00-281-2002

===== Product Identification =====

Product ID:TOLUENE

MSDS Date:06/10/1994

FSC:6810

NIIN:00-281-2002

MSDS Number: BTKQL

=== Responsible Party ===

Company Name:FEDERAL SPECIFICATIONS

Address:PROMULGATED BY GENERAL SERVICES ADMIN

City:WASHINGTON

State:DC

Country:US

Info Phone Num:804-279-4371 DSN-695-4371(DLA-HMIS)

Emergency Phone Num:800-851-80

61 (DOD-TRANSPORT ONLY)

Preparer's Name:HMIS STAFF

CAGE:81348

=== Contractor Identification ===

Company Name:FEDERAL SPECIFICATIONS, PROMULGATED BY GSA

Box:City:WASHINGTON

State:DC

Country:US

CAGE:81348

===== Composition/Information on Ingredients =====

Ingred Name:TOLUENE (SARA III)

CAS:108-88-3

RTECS #:XS5250000

Fraction by Wt: 100%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:200 PPM; Z-2

ACGIH TLV:S, 50 PPM; 9394

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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==== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 5000 MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: MAY BE HARMFUL BY

INHALATION,INGESTION OR SKIN ABSORPTION. VAPOR OR MIST IS IRRITATING TO EYES, MUCOUS MEMBRANES, UPPER RESPIRATORY TRACT. CAUSES SKIN IRRITATION. EXPOSURE CAN CAUSE GI TRACT DISTURBANCES. CHRONIC: PROLONGED OR REPEA

TED EXPOSURE MAY CAUSE DAMAGE TO LIVER & KIDNEY, BLOOD EFFECTS, AND CNS EFFECTS.

Explanation of Carcinogenicity:TOLUENE IS NOT LISTED BY NTP, IARC NOR REGULATED BY OSHA AS A CARCINOGEN.

Effects of Overexposure:INHALED/ABSORBED BY SKIN/INGESTED (CNS EFFECTS): DIZZINESS, NAUSEA, HEADACHE, VOMITING. INHALED: SHORTNESS OF BREATH. EYES: PAIN, BURNING SENSATION, TEARING. SKIN CONTACT: REDNESS, SWELLING, DISCOMFORT.

Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF AIRM ENTS

OR WITH A PRE-EXISTING DISEASE INVOLVING THE LIVER OR KIDNEY MAY BE AT INCREASED RISK FROM EXPOSURE.

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===== First Aid Measures =====

First Aid:INHALATION:REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING. GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL AD VICE. INGESTION:DO NOT INDUCE VOMITING. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL ATTENTION.

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===== Fire Fighting Measures =====

Flash Point Method:CC

Flash Point:=-4.4C, 40.F

Lower Limits:1.2%

Upper Limits:7.1%

Extinguishing Media:DRY CHEMICAL, FOAM, OR CARBON DIOXIDE. WATER MAY BE EFFECTIVE FOR COOLING, BUT MAY NOT EFFECT EXTINGUISHMENT.

Fire Fighting Procedures:APPROACH FIRE FROM UPWIND TO AVOID HAZARDOUS VAPORS OR TOXIC DECOM

POSITION PRODUCTS. USE WATER SPRAY TO KEEP CONTAINERS COOL. WEAR SCBA/FULL BUNKER GEAR. Unusual Fire/Explosion Hazard:EXTREMELY FLAMMABLE LIQUID IS HEAVIER THAN AIR AND MAY TRAVEL TO A DISTANT IGNITION SOURCE & FLASHBACK.LIQUID FLOATS ON WATER/MAY IGNITE/SPREAD FIRE.

===== Accidental Release Measures =====

Spill Release Procedures:REMOVE ALL SOURCES OF IGNITION. USE NON-SPARKING TOOLS. USE PROPER PERSONAL PROTECTION. CONTAIN FREE MATERIAL IF POSSIBLE. USE SUITABLE INERT ABSORBENT MATERIAL AND RECOVER FOR PROPER DISPOSAL IN AN APPROVED CONTAINER. DO NOT FLUSH TO SEWER. Neutralizing Agent:NOT APPLICABLE.

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE. Other Precautions:STORE OUTSIDE IN A STORAGE LOCKER. STORE AWAY FROM OXIDIZING MATERIALS. BOND AND GROUND DURING TRANSFER OPERATIONS. USE NON-SPARKING TOOLS WHEN HANDLING. STORE IN NO SMOKING AREAS.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF ENGINEERING CONTROLS FAIL, NON-ROUTINE USE OR EMERGENCY OCCURS; USE NIOSH/MSHA APPROVED SUPPLIED AIR RESPIRATOR OR SELF-CONTAINED BREATHING APPARATUS. USE IN ACCORDANCE WITH 29 CFR 1910.134. Ventilation:LOCAL/GENERAL TO MAINTAIN PEL/TLV. Protective Gloves:NEOPRENE, NITRILE, OR NATURAL RUBBER Eye Protection:SAFETY GOGGLES WITH OPTIONAL FACE SHIELD Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER, WORK CLOTHING AND APRON AS REQUIRED. Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR. Supplemental Safety and Health AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS. MSDS GENERATED BY DLA-HMIS STAFF FOR

TECHNICAL SUPPORT; UNABLE TO DETERMINE MANUFACTURER/VENDOR FOR  
CONTRACT # DLA-40086-C-1205, CONTAINER MARKED WITH CAGE 81348  
(GENERIC GOV'T GAGE). USED SAX/ALDRICH/NFPA GUIDE TO MAKE

===== Physical/Chemical Properties =====

HCC:F2

Boiling Pt:=110.6C, 231.F

Melt/Freeze Pt:=-95.C, -139.F

Vapor Pres:37MMHG@30C

Vapor Density:3.14

Spec Gravity:0.867

Evaporation Rate & Reference:2.2(N-BUTYL ACETATE=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR

, COLORLESS LIQUID WITH BENZENE-LIKE ODOR.

Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, CONCENTRATED NITRIC OR SULFURIC ACID, HALOGENS  
OR MOLTEN SULPHUR, CERTAIN PLASTICS OR RUBBERS.

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES  
OF IGNITION; INCOMPATIBLE MATERIALS.

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE; ACRID  
S  
MOKE AND IRRITATING FUMES.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSAL MUST BE MADE IN ACCORDANCE WITH ALL  
APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.  
REPORTABLE QUANTITY FOR RELEASES IS 1000 POUNDS. EPA/RCRA WASTE  
NUMBERS U220, D001 MAY APPLY TO UNUSED PRODUCT.

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