

MALLINCKRODT INC SCIENCE PRODUCTS DIVISION -- TOLUENE -- 6810-00-579-8431

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Product Identification  
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Product ID:TOLUENE

MSDS Date:04/06/1989

FSC:6810

NIIN:00-579-8431

MSDS Number: BMWTK

=== Responsible Party ===

Company Name:MALLINCKRODT INC SCIENCE PRODUCTS DIVISION

Address:PARIS BYPASS

Box:M

City:PARIS

State:KY

ZIP:40361

Country:US

Info Phone Num:314-982-5000

Emergency Phone Num:314-982

-5000

CAGE:62910

=== Contractor Identification ===

Company Name:MALLINCKRODT SPECIALTY CHEMICALS CO

Address:222 RED SCHOOL LANE

Box:City:PHILLIPSBURG

State:NJ

ZIP:08865

Country:US

Phone:908-859-2151

CAGE:62910

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Composition/Information on Ingredients  
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Ingred Name:TOLUENE (SARA III)

CAS:108-88-3

RTECS #:XS5250000

Fraction by Wt: 99%+%

OSHA PEL:200 PPM/150 STEL

ACGIH TLV:50 PPM; 9293

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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Hazards Identificat

ion =====

LD50 LC50 Mixture:LD50 (ORAL RAT) IS 5 GM/KG

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES

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

Health Hazards Acute and Chronic:INHALATION MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT. SWALLOWING MAY CAUSE ABDOMINAL SPASMS.

ASPIRATION INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS, WHICH MAY BE FATAL. SKIN CONTACT MAY CAUSE IRRITATION. EYE CONTACT MAY CAUSE IRRITATION, REDNESS, & TEARING. CHRO

NIC POISONING MAY DAMAGE KIDNEYS & LIVER.

Explanation of Carcinogenicity:THIS PRODUCT IS NOT LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN, MUTAGEN, TERATOGEN OR NEUROTOXIN.

Effects of Overexposure:SYMPTOMS INCLUDE FATIGUE, CONFUSION, HEADACHE, DIZZINESS AND DROWSINESS. PECULIAR SKIN SENSATIONS (PINS AND NEEDLES) OR NUMBNESS MAY BE PRODUCED. VERY HIGH CONCENTRATIONS MAY CAUSE UNCONSCIOUSNESS AND DEATH.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISO

RDERS OR IMPAIRED LIVER OR KIDNEY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS SUBSTANCE. ALCOHOLIC BEVERAGE CONSUMPTION CAN ENHANCE ITS TOXIC EFFECTS.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. GIVE MOUTH-TO-MOUTH RESUSCITATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION. EYES: FLUSH WITH RUNNING WATER FOR 15 MINUTES WHILE HOLDING EYELID. GET MEDICAL ATTENTIO

N. SKIN:

WASH WITH PLENTY OF SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET MEDICAL ATTENTION. INGESTED: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY.

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

Flash Point Method:CC

Flash Point:40.0F,4.4C

Autoignition Temp:Autoignition Temp Text:896F

Lower Limits:1.2

Upper Limits:7.1

Extinguishing Media:USE DRY CHEMICAL, FOAM OR CARBON DIOXIDE. WATER MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOSURES AND TO

DILUTE SPILLS.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:ABOVE FLASH POINT, VAPOR AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS . CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE AND EXPLOSIONS.

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

Spill Release Procedures:REMOVE ALL SOURCES OF IGNITION. USE

NON-SPARKING TOOLS AND EQUIPMENT. WEAR PROTECTIVE CLOTHING AND SCBA. CONTAIN AND RECOVER LIQUID FOR RECLAMATION WHEN POSSIBLE. DO NOT FLUSH TO SEWER. SMALL SPILLS MAY BE ABSORPED WITH INERT MATERIAL OR PAPER TOWEL.

Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:PROTECT AGAINST PHYSICAL DAMAGE. STORE IN A COOL, DRY WELL-VENTILATED LOCATION, AWAY FROM ANY AREA WHERE

THE FIRE HAZARD MAY BE ACUTE.

Other Precautions:OUTSIDE OR DETACHED STORAGE IS PERFERRED. SEPARATE FROM OXIDIZING MATERIALS. CONTAINERS SHOULD BE BONDED AND GROUNDED FOR TRANSFERS TO AVOID STATIC SPARKS. STORAGE AND USE AREAS SHOULD BE NO SMOKING A REAS. USE NON-SPARKING TYPE EQUIPMENT.

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

Respiratory Protection:IF THE TLV IS EXCEEDED, A HALF MASK CHEMICAL CARTRIDGE RESPIRATOR MAY BE WORN UP TO TEN TIMES THE TLV O R THE

MAXIMUM USE CONCENTRATION SPECIFIED BY THE RESPIRATOR SUPPLIER, WHICHEVER IS LESS.

Ventilation:A SYSTEM OF LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED TO KEEP EMPLOYEE EXPOSURES BELOW THE AIRBORNE EXPOSURE LIMITS.

Protective Gloves:IMPERVIOUS

Eye Protection:CHEMICAL SAFETY GOGGLES W/FACE SHIELD

Other Protective Equipment:IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING BOOTS, LAB COAT, APRON OR COVERALLS TO PREVENT SKIN CONTACT.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIEN

E PRACTICES AND

RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.

Supplemental Safety and Health

LOCAL EXHAUST VENTILATION IS GENERALLY PREFERRED BECAUSE IT CAN CONTROL THE EMISSIONS OF THE CONTAMINANT AT ITS SOURCE. CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH THIS MATERIAL. MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA. REPORTABLE QUANTITY (RQ) IS 1000 LBS.

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

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HCC:F2

Boiling Pt:=110.6C, 231.F

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

Vapor Pres:22

Vapor Density:3.14

Spec Gravity:0.86

Evaporation Rate & Reference:2.0 (N-BUTYL ACETATE=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR, COLORLESS LIQUID WITH AROMATIC BENZENE-LIKE ODOR.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

AVOID STRONG OXIDIZING AGENTS, STRONG MINERAL ACIDS, MITROGEN

TETRAOXIDE. WILL ATTACK SOME FORMS OF PLASTIC AND RUBBER.

Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES

Hazardous Decomposition Products:TOXIC GASES AND VAPORS (E.G. CARBON MONOXIDE AND CARBON DIOXIDE) MAY BE RELEASED IN A FIRE INVOLVING TOLUENE.

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

Waste Disposal Methods:MAY BE ATOMIZED IN A SUITABLE RCRA APPROVED COMBUSTION CHAMBER. ENSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGU

LATIONS.

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