

SDS Safety Data Sheet – Mounting Medium Toluene

05/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Mounting Medium Toluene

SYNONYMS: None

PRODUCT CODES: ES725,ES726

MANUFACTURER: Azer Scientific, Inc.

ADDRESS: 701 Hemlock Rd, Morgantown, PA 19543

CHEMTREC PHONE: 800-424-9300

SUPPORT: 610-524-5810

FAX: 610-901-3046

PRODUCT USE: Laboratory Reagent

PREPARED BY: CB

SECTION 1 NOTES:

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Flammable liquids Category 2, Serious eye irritation Category 2A, Acute toxicity oral, Category 4, Acute toxicity Inhalation Category 4, Specific organ toxicity – repeated exposure Category 2



Signal Word: Danger!

Hazard Phrases	
H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H332	Harmful if inhaled.
H318	Causes serious eye irritation.

Precautionary Phrases	
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P233	Keep container tightly closed.
P260	Do not breathe dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P301+P310	IF SWALLOWED: Call a POISON CENTER or doctor/physician
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P243	Take precautionary measures against static discharge.

SECTION 2 NOTES:

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT:</u>	<u>CAS NO.</u>	<u>% WT</u>
Toluene	108-88-3	44%
Resin	68240-06-5	57%

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

- EYES:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- SKIN:** In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- INGESTION:** Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- INHALATION:** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: Flammable

FLASH POINT: 40°F Open cup

FLAMMABLE LIMITS: LEL 1.7 UEL 7.1

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 0
OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 0
PROTECTION:

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

NOT SUITABLE: Do not use water jet.

SPECIAL FIRE FIGHTING PROCEDURES: Wear protective clothing with NIOSH approved breathing apparatus. Products of combustion may be harmful in a fire situation. Burns with invisible

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, Ketones

SECTION 5 NOTES: Caution, Static accumulator!

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

Small spill and leak: Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

Large spill and leak: Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with dry earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined area: dike if needed. Advise EPA and state agencies if large spills occur that could reach any surface water

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

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HANDLING: Keep away from heat. Keep away from sources of ignition. Ground and bond all equipment containing material. Do not ingest. Do not breathe gas/ fumes/ vapor/ spray. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids.

STORAGE: Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

RESPIRATORY PROTECTION: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator

EYE PROTECTION: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

SKIN PROTECTION: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: neoprene

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

WORK HYGIENIC PRACTICES: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

EXPOSURE GUIDELINES:

Component	Source	Type	Value	Note
Toluene	ACGIH TLV	STEL	250 ppm 15 minute(s)	Absorbed through skin
	ACGIH TLV	TWA	200 ppm 8 hour(s)	Absorbed through skin
	OSHA PEL	TWA	200 ppm 8 hour(s)	Absorbed through skin
	OSHA PEL	STEL	300 ppm 15 minute(s)	Absorbed through skin
	NIOSH REL	TWA	200 ppm 10 hour(s)	Absorbed through skin
	NIOSH REL	STEL	250 ppm 15 minut(s)	Absorbed through skin

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, light amber color
ODOR: Characteristic hydrocarbon
ODOR THRESHOLD: 0.16 ppm
PHYSICAL STATE: liquid
pH AS SUPPLIED: Not Available
BOILING POINT: 110°C (233°F)
MELTING/FREEZING POINT: -95°C (-139°F)
VAPOR PRESSURE (mmHg): 28.4 mm Hg Toluene
VAPOR DENSITY (AIR = 1): 3.1
EVAPORATION RATE: Not Available
SOLUBILITY IN WATER: Not soluble in water
MOLECULAR WEIGHT: Mixture
VISCOSITY: Not established

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Product is stable under normal conditions of use.

CONDITIONS TO AVOID (STABILITY): Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizers, chromic anhydride, organic acids

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

HAZARDOUS POLYMERIZATION: No hazardous polymerization

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity**Oral LD50**

Rat: 2,600-7,500 ppm

Inhalation LC50

Rat: 8000 ppm, 4 hours

Dermal LD50

Rabbit: 12 hours, 124 mg/kg

Other information on acute toxicity

no data available

Skin irritation

Rabbit mild; 500 mg Rabbit moderate; 20 mg/24hours

Eye irritation

Human; 300 ppm Rabbit mild; 435 mg

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Signs and Symptoms of Exposure

Vision blurring, drowsiness, and headache.

ROUTES OF ENTRY: Skin/eye contact, inhalation, and ingestion.

CHRONIC HEALTH HAZARDS: May cause liver, heart and kidney damage. Repeated or prolonged exposure to toluene may cause headache, loss of appetite, drowsiness, nervousness and pallor. Continued repeated inhalation of toluene to the point of euphoria has caused irreversible encephalopathy with ataxis, tremulousness, emotional lability, and diffuse cerebral atrophy.

ACUTE HEALTH HAZARDS: Vapors may cause eyes, skin and respiratory irritation, drowsiness, nausea, headache and vomiting. Kidney or liver damage may occur.

TARGET ORGANS: Nervous/Blood system, kidney, liver, heart, optic nerve

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

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Ecotoxicity:

<u>Species</u>	<u>Period</u>	<u>Result</u>
Daphia Magna (EC50)	48 hour/hours	>10000 mg/l
Oncorhynchus myKiss (EC50)	48 hour/hours	13200 mg/l
Lepomis Macrochirus (EC50)	48 hour/hours	16000 mg
Daphia Magna (LC50)	96 hour/hours	>100 mg/l
Pimephales Promelas (LC 50)	96 hour/hours	>100 mg/l
Lepomis Macrochirus (LC50)	96 hour/hours	15400 mg/l

Environmental: From soil, substance evaporates and is microbially biodegraded. In water, substance volatilizes and biodegrades.

Physical: Photochemically produced hydroxyl radicals degrade substance.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Unused product: dispose as a regulated hazardous waste. Spent product or spill clean up-follow all provincial, local, state, and federal regulations.

RCRA P-Series: None listed.

RCRA U-Series: CAS# 108-88-3: waste number U220.

SECTION 13 NOTES:

Hazardous to the environment, do not dispose of down drains or release into river ways.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: Toluene
HAZARD CLASS: 3
ID NUMBER: UN1294
PACKING GROUP: II
LABEL STATEMENT:
ENVIRONMENTAL HAZARDS: No

AIR TRANSPORTATION

PROPER SHIPPING NAME: Toluene
HAZARD CLASS: 3
ID NUMBER: UN1294
PACKING GROUP: II
LABEL STATEMENTS:

OTHER AGENCIES:

Canadian TDG:
PROPER SHIPPING NAME: Toluene
HAZARD CLASS: 3
ID NUMBER: UN1294
PACKING GROUP: II
LABEL STATEMENTS: Flashpoint 4°C

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

United States

HCS Classification: Flammable liquid
 Highly toxic material
 Irritating material
 Target organ effects

U.S. Federal regulations:

United States inventory (TSCA 8b): None of the chemicals are listed
 TSCA8 (d) H and S data reporting: Toluene : 1982
 TSCA (Toxic Substance Control Act): This product is listed on the TSCA Inventory.
SARA Codes: Toluene CAS # 108-88-3: acute, flammable.
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This material contains Toluene (CAS# 108-88-3, 99%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 108-88-3 is listed as a hazardous air pollutant (HAP). This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 108-88-3 is listed as a Hazardous Substance under the CWA. CAS# 108-88-3 is listed as a Priority Pollutant under the Clean Water Act. CAS# 108-88-3 is listed as a Toxic Pollutant under the Clean Water Act.

DEA List II Chemicals

(Essential Chemicals): Toluene

RTK: Toluene, CAS 108-88-3, Listed, FL, MA, MN, NJ, PA, CT

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<u>Ingredient name</u>	<u>Cancer</u>	<u>Reproductive</u>	<u>No significant risk level</u>	<u>Maximum acceptable dosage level</u>
Toluene	No	Yes		7000 ug/day

CANADA

WHMIS (Canada):

Class B-2: Flammable liquid
 Class D-1A: Material causing immediate and serious toxic effects (Very Toxic)
 Class D-2B: Material causing other toxic effects (Toxic)

Canadian lists:

CEPA Toxic substances: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: The following components are listed:
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

CEPA DSL / CEPA NDSL:

All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

International lists:

Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.

SECTION 16: OTHER INFORMATION

National Fire Protection Association (U.S.A.)



DISCLAIMER: This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Azer Scientific be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.

PREPARATION INFORMATION: Prepared 5/19/2015 REV1