

# Material Safety Data Sheet

## Histology / Cytology Reagents

### Acrytol®

### Mounting Medium

<b>Section 1. Product and Preparation Information</b>			
<b>Product Identifier</b> <b>Acrytol Mounting Medium</b>		<b>Product Use</b> Coverslipping and slide preparation	<b>Date Prepared</b> August 2006
<b>Synonym / Chemical Name</b> Methylbenzene, methylbenzol, phenylmethane, toluol, methacrylic acid methyl ester, MMA			<b>Document #</b> 112
<b>Manufacturer/ Preparer</b> Surgipath Canada, Inc. 83 Terracon Place Winnipeg, Manitoba R2J 4B3		Surgipath Medical Industries, Inc. 5205 Route 12 Richmond, IL 60071	<b>Emergency Contact</b> Chemtrec USA and Canada 800.424.9300 Chemtrec International 703.527.3887 Canadian Non-Transport Calls 800.665.7425 USA Non-Transport Calls 800.225.8867

<b>Section 2. Preventive Measures</b>				
<b>Personal Protection</b>		<b>NFPA</b>	<b>US DOT</b>	<b>Canadian WHMIS</b>
<b>Personal Protection</b>		<b>Emergency Overview</b>		
<b>Eyes</b>	Safety glasses	Highly flammable liquid and vapor, vapor may cause flash fire. Cannot be made non-poisonous. May be fatal if swallowed. Contains material that may cause kidney, lung and liver damage. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not get in eyes. For laboratory use only.		
<b>Body</b>	Laboratory coat			
<b>Respiratory</b>	NIOSH/MSHA approved respirator when ventilation is inadequate			
<b>Hands</b>	Latex or nitrile gloves			
<b>Engineering Controls</b> General mechanical ventilation or laboratory fume hood. Ensure that eyewash stations and quick drench showers are proximal to the workstation or tissue processor.				
<b>Handling and Storage</b> Dissipate static electricity during transfer by grounding and bonding containers and equipment. If air concentrations may exceed lower explosive limit, use explosion-proof equipment. Keep containers closed and out of reach of children. Do not use near open flames or sparks. Store at room temperature. Store in flammable liquid safety cabinet when possible.				
<b>Small Spill and Leak</b> Absorb with an inert dry material and place in an appropriate waste disposal container.				
<b>Large Spill and Leak</b> Keep away from heat and ignition sources. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Avoid skin and eye contact. Prevent entry into sewers, basements or confined areas: dike if needed. Eliminate all ignition sources. Be careful that airborne concentrations do not exceed published exposure and lower explosive limits.				
<b>Waste Disposal</b> <i>Unused Product</i> – Dispose as a regulated hazardous waste. <i>Spent product or spill clean up</i> - Follow all provincial and federal rules.				

<b>Section 3. Hazardous Ingredients</b>					
Hazardous Ingredient	% wt.	CAS Number	LD50	LC50	TDG PIN
Toluene	<75	108-88-3	636 mg/kg oral rat 12,210 mg/kg skin rabbit	49 gm/m <sup>3</sup> /4hr inhalation rat	
Acrylic Resin	<50	80-62-6	7,872 mg/kg oral rat 3,625 mg/kg oral mouse	78,000 mg/m <sup>3</sup> /4hr inhalation rat 18,500 mg/m <sup>3</sup> /2hr inhalation mouse	
Plasticizer	<20	84-74-2	7499 mg/kg oral rat 3,474 mg/kg oral mouse	4,250 mg/m <sup>3</sup> inhalation rat 25 gm/m <sup>3</sup> /2hr inhalation mouse	
Antioxidant	<1	128-37-0	NA	NA	

## Section 4. First Aid Measures

<b>Eye Contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
<b>Skin Contact</b>	Remove contaminated clothing immediately. Wash the affected areas with soap or mild detergent and large amounts of water for at least 15 minutes.
<b>Inhalation</b>	Move individual to fresh air immediately. If breathing is difficult, give oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Give no more than 2 glasses of water. Get medical attention immediately. Do not induce vomiting

## Section 5. Physical Data

<b>Physical State</b> Liquid	<b>Odor and Appearance</b> Sour burnt odor, colorless	<b>Odor Threshold (ppm)</b> 1.6 ppm	<b>Solubility</b> Insoluble in water	<b>Auto-ignition Temp</b> 1,644° F (896° C)
<b>Vapor Pressure</b> 25.89 mmHg @ 20C	<b>Vapor Density</b> 3.6 (air-1)	<b>Evaporation Rate</b> N/A	<b>Boiling Point</b> 231° F (110° C)	<b>Flash Point CC</b> 44° F (6° C)
<b>pH</b> N/A	<b>Specific Gravity</b> 0.98 Water=1	<b>Coeff. Water/oil Dist.</b> N/A	<b>Freezing Point</b> -101° F (-74° C)	<b>Flammable Limits</b> LEL – 1% UEL – 7%

## Section 6. Fire and Explosion

<b>Flammability</b> Flammable Liquid IB (Canada B2)	<b>Conditions</b> Excessive heat, sparks and open flames.	<b>Fl. Pt - Auto Ignition - Flammable Limits</b> See Physical Data above
<b>Explosivity</b> Not explosive under normal conditions of use. Vapors are heavier than air and may settle in low areas. Vapors may travel long distances to an ignition source and flash back explosively. Flame may be invisible. Not sensitive to impact. Probably will not accumulate static charge due to high electrical conductivity, however proper grounding during transfer is recommended (NFPA 77).		
<b>Hazardous Combustion Products</b> Carbon monoxide, carbon dioxide	<b>Means of Extinction</b> Small Fire – Use DRY chemical powder. Large Fire – Use alcohol foam, water spray or fog	

## Section 7. Reactivity

<b>Stability</b> Product is stable under normal conditions of use.	<b>Hazardous Decomposition Products</b> Carbon monoxide	
<b>Conditions of Reactivity</b> NA	<b>Hazardous Polymerization</b> No hazardous polymerization.	<b>Incompatibility</b> Reactive with oxidizing agents and acids.

## Section 8. Toxicological Properties

<b>Routes of Entry</b>	Absorbed through skin, eye, inhalation and ingestion.					
<b>Target Organs</b>	Liver, kidney					
<b>Effects of Acute Exposure</b>						
<b>Eye</b>	Slightly hazardous in case of eye contact (irritant, corrosive). May cause eye burns					
<b>Skin</b>	Slightly hazardous (irritant, corrosive). Skin inflammation is characterized by itching, scaling, reddening or occasionally blistering.					
<b>Absorption</b>	May be absorbed through skin, eye, inhalation and ingestion					
<b>Inhalation</b>	Slightly hazardous in case of inhalation					
<b>Ingestion</b>	May be fatal if swallowed					
<b>Effects of Chronic Exposure</b>						
Toluene is toxic to blood and liver. Inhalation may worsen conditions such as emphysema or bronchitis. Repeated skin exposure may cause defatting of the skin.						
<b>Carcinogenic Effects</b>						
Classified A4 (not classified for humans) ACGIH. Classified 3 (not classifiable for human) IARC.						
<b>Reproductive Toxicity</b>						
Detected in maternal milk in humans. Passes through the placental barrier in animal. Embryotoxic and/or foetotoxic in animal						
<b>Teratogenic and Mutagenic Effects</b> NA						
<b>Exposure Limits</b>	<b>OSHA PEL TWA</b>	<b>ACGIH TLV TWA</b>	<b>STEL</b>	<b>TWAEV (Ont.)</b>	<b>STE V (Ont.)</b>	<b>CEV (Ont.)</b>
Toluene	200 ppm, 300 ppm C	100 ppm, 150 ppm C	NA	100 ppm (Alb.)	150 ppm (Alb.)	NA
Plasticizer	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup> , 10 mg/m <sup>3</sup> C	NA	5 mg/m <sup>3</sup>	NA	NA
Antioxidant	NA	10 mg/m <sup>3</sup> , 20 mg/m <sup>3</sup> C	NA	NA	NA	NA
Acrylic resin	410 mg/m <sup>3</sup>	100 ppm, 125 ppm C	NA	100 ppm	125 ppm	NA

<b>Section 9. Regulatory Information</b>			
OSHA Hazardous Yes	Cal. Prop. 65 Toluene listed for birth defects	Canadian WHMIS B2, D1A, D2A	RCRA Regulated D001, F003
SARA 302/304 Not Listed	SARA 313 Listed	CERCLA 102A Listed	RQ 1000 lbs. Toluene
CWA 307 Listed	CWA 311 Not Listed	CAA 112 Release Prevention Listed	CAA 112 Reg. Flam. Substance Not Listed
CAA 112 Reg. Toxic Substance Not Listed	TSCA Inventory All ingredients Listed	EEC Flammability R11 – Highly Flammable	CEPA DSL All ingredients Listed
Proper US DOT Shipping Name Flammable Liquids, NOS (methyl methacrylate, toluene), 3, UN1993, PG II	TDG Classification Class 3 Flammable Liquid	IATA Classification Class 3 Flammable Liquid	Limited Quantity Yes
The information provided above is based upon unused product. Product characteristics may change after processing, requiring further classification.			

This Material Safety Data Sheet has been prepared in accordance with the Canadian Controlled Products Regulations and 29CFR1910.1200. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.