

MATERIAL SAFETY DATA SHEET

MSDS DATE:08/08/07

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MAY GRUNWALD SOLUTION
SYNONYMS: METHYL ALCOHOL, WOOD ALCOHOL, CARBINOL, METHYLOL, WOOD SPIRIT
PRODUCT CODES: 26064-05
MANUFACTURER: ELECTRON MICROSCOPY SCIENCES
DIVISION: 1560 INDUSTRY ROAD/P.O. BOX 550
ADDRESS: HATFIELD, PA 19440

EMERGENCY PHONE: 215-412-8400
CHEMTREC PHONE: 800-424 -4300

FAX PHONE: 215-412-8450

CHEMICAL NAME: N/A
CHEMICAL FAMILY: N/A

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:

MAY GRUNWALD POWDER (MAY GRUNWALD STAIN IS A METHYLENE BLUE EOSINATE, OBTAINED AS THE PRECIPITATE FORMED IN MIXING SOLUTIONS OF METHYLENE BLUE AND EOSIN Y)
METHANOL

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
N/A	N/A	0.25	
00067-56-1	N/A	100	
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:	200	260	
OSHA PEL STEL :	250	310	
OSHA PEL CEILING:	N/A	N/A	
ACGIH TLV-TWA:	200	260	
ACGIH TLV STEL:	N/A	N/A	
ACGIH TLV CEILING:	N/A	N/A	

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

ROUTES OF ENTRY: INHALATION, SKIN, INGESTION

POTENTIAL HEALTH EFFECTS

EYES: VAPORS MAY BE IRRITATING TO EYES. CAUSES DRYNESS AND IRRITATION TO EYES. EYE CONTACT MAY RESULT IN TEMPORARY CORNEAL DAMAGE

SKIN: VAPORS MAY BE IRRITATING TO SKIN. CAUSES DRYNESS AND IRRITATION TO SKIN. PROLONGED CONTACT MAY RESULT IN DERMATITIS.

INGESTION: MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED

INHALATION: HARMFUL IF INHALED. VAPORS MAY BE IRRITATING TO THROAT. INHALATION MAY CUASE HEADACHE, DIZZINESS, FATIGUE AND WEAKNESS IN ARMS AND LEGS.

ACUTE HEALTH HAZARDS: AUES IRRITATION AND DRYNESS TO SKIN, EYES, AND THROAT. INHALATION MAY CAUSE DIZZINESS, HEADACHE, FATIGUE AND WEAKNESS.

CHRONIC HEALTH HAZARDS: MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

CARCINOGENICITY

OSHA: NO ACGIH: N/A
OTHER: N/A

NTP: NO

IARC: NO

MATERIAL SAFETY DATA SHEET

MSDS DATE:08/08/07

SECTION 4: FIRST AID MEASURES

EYES: FLUSH WITH WATER FOR 15 MINUTES. IF IRRITATION OCCURS, SEEK MEDICAL ATTENTION

SKIN: WASH WITH SOAP AND WATER FOR AT LEAST 15 MINUTES, WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. IF IRRITATION OCCURS, SEEK MEDICAL ATTENTION. WASH CLOTHING BEFORE REUSE.

INGESTION: CALL A PHYSICIAN! IN CONSCIOUS, IMMEDIATELY INDUCE VOMIING.

INHALATION: REMOVE TO FRESH AIR, IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFCULT, GIVE OXYGEN.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: N/A

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: 36.5
(% BY VOLUME) LOWER: 6

FLASH POINT: N/A

F: N/A

C: 15-5 DEG

METHOD USED: OPEN CUP

AUTOIGNITION TEMPERATURE: N/A

F: N/A

C: N/A

NFPA HAZARD CLASSIFICATION

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

OTHER: N/A

HMIS HAZARD CLASSIFICATION

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

PROTECTION: N/A

EXTINGUISHING MEDIA: ALCOHOL FOAM, DRY CHEMICAL OR CARBON DIOXIDE (WATER ME BE INEFFECTIVE)

SPECIAL FIRE FIGHTING PROCEDURES: FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF CONTAINED BREATHING APARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE. MOVE CONTAINERS FROM FIRE IF IT CAN BE DONE SO WITHOUT RISK. USE WATER TO KEEP FIRE EXPOSED CONTAINERS COOL

UNUSUAL FIRE AND EXPLOSION HAZARDS: VAPORS MAY FLOW ALONG SURFACES TO DISTANT IGNITION SOURCES AND THEN FLASH BAK. CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE.

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: WEAR SELF CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. SHUT OFF IGNITION SOURCES: NO FLARES, SMOKING OR FLAMES IN AREA. STOP LEAK IF YOU CAN DO SO WITHOUT RISK. TAKE UP WITH SAND OR OTHER NON-COMBUSTIBLE MATERIAL AND CONTAINERIZE FOR PROPER DISPOSAL

SECTION 7: HANDLING AND STORAGE

MATERIAL SAFETY DATA SHEET

MSDS DATE:08/08/07

HANDLING AND STORAGE: AVOID ALL ROUTES OF EXPOSURE. POISON! DANGER! HARMFUL IF INHALED. KEEP AWAY FROM HEAT, SPARK, AND FLAMES. DO NOT GET IN EYES, ON SKIN OR CLOTHING. AVOID BREATHING VAPOR.

OTHER PRECAUTIONS: KEEP IN TIGHTLY CLOSED CONTAINER. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. STORE IN A COOL, DRY, WELL VENTILATED FLAMMABLE LIQUIDS STORAGE AREA AT CONCENTRATIONS ABOVE 200 PPM

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: N/A

VENTILATION: LOCAL EXHAUST, MECHANICAL (GENERAL). FACE SHIELD/ SAFETY GOGGLES

RESPIRATORY PROTECTION: SELF CONTAINED BREATHING APPARATUS IS ADVISED

EYE PROTECTION: SAFETY GOGGLES

SKIN PROTECTION: PROTECTIVE GLOVES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: APPROVED WORK CLOTHES

WORK HYGIENIC PRACTICES: USE CARE WHEN HANDLING. AVOID ALL ROUTES OF EXPOSURE

EXPOSURE GUIDELINES: N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: VOLATILE, BLUISH-PURPLE

ODOR: N/A

PHYSICAL STATE: LIQUID

pH AS SUPPLIED: N/A

pH (Other): N/A

BOILING POINT:

F: N/A

C: 148.1 DEG

MELTING POINT: 100 %

F: N/A

C: N/A

FREEZING POINT: N/A

F: N/A

C: N/A

VAPOR PRESSURE (mmHg): 97

@

F: N/A

C: N/A

VAPOR DENSITY (AIR = 1): 1.11

@

F: N/A

C: N/A

@

F: N/A

C: N/A

EVAPORATION RATE:

BASIS (=1): 5.91

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

SOLUBILITY IN WATER: YES

MATERIAL SAFETY DATA SHEET

MSDS DATE:08/08/07

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A
BY WT/ BY VOL @
F: N/A
C: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: N/A LBS/GAL
WITHOUT WATER: N/A LBS/GAL

MOLECULAR WEIGHT: N/A
VISCOSITY: N/A
@
F: N/A
C: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE

CONDITIONS TO AVOID (STABILITY): HEA, FLAME, AND OTHER SOURCES OF IGNITION.

INCOMPATIBILITY (MATERIAL TO AVOID): STRONG OXIDIZING AGENTS, STRONG ACIDS

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID (POLYMERIZATION): NONE

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:
TOXICITY:
LD50 (ORAL-RAT) (MG/KG) -5628
LD50 (IPR-RAT) (MG/KG) - 9540
LD50 (SCU-MOUSE) (MG/KG) - 9800

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/A

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: COMPLY WITH FEDERAL, STATE, LOCAL REGULATIONS.

RCRA HAZARD CLASS: N/A

SECTION 13: DISPOSAL CONSIDERATIONS (con't)

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

MATERIAL SAFETY DATA SHEET

MSDS DATE:08/08/07

PROPER SHIPPING NAME: MAY GRUNWALD SOLUTION
HAZARD CLASS: N/A
ID NUMBER: N/A
PACKING GROUP: N/A
LABEL STATEMENT: N/A

WATER TRANSPORTATION

PROPER SHIPPING NAME: SAME
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

AIR TRANSPORTATION

PROPER SHIPPING NAME: SAME
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

OTHER AGENCIES: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: N/A
313 REPORTABLE INGREDIENTS: N/A

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: N/A

PREPARATION INFORMATION: N/A

DISCLAIMER: IN COMPLIANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD, 2.9 C.F.R 1910. 1200, WE ARE PROVIDING YOU WITH A MSDS FOR THE HAZARDOUS MATERIAL YOU ARE PURCHASING.

IT IS YOUR RESPONSIBILITY TO EDUCATE YOUR EMPLOYEES ON THE SAFE USE OF THE HAZARDOUS MATERIAL.

ELECTRON MICROSCOPY SCIENCES MAKES NO PRESENTATION AS TO THE ACCURACY OF THE INFORMATION IN THE MSDS. THE INFORMATION IS BELIEVED TO BE CORRECT; HOWEVER, YOU (THE CUSTOMER), SHOULD PERFORM YOUR OWN INVESTIGATION AND INDEPENDENT VERIFICATION. IF YOU RESELL THE PRODUCT, YOU ARE RESPONSIBLE TO FORWARD THE INFORMATION IN THE MSDS TO YOUR CUSTOMER.