TED PELLA, INC.
Microscopy Products for Science and Industry

Material Safety Data Sheet

Product No. 16033 Mikrostik™
Issue Date (09-16-11)
Review Date (05-03-12)

Section 1: Product and Company Identification

Product Name: Mikrostik™
Synonym: None
Company Name
Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477
Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Section 2: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA TWA mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
Methyl Ethyl Ketone (78-93-3)	78-80	590	200 PPM	No	No	No
Iso-butyl Acetate (110-19-0)	4-6	700	20 PPM	No	No	No
Toluene (108-88-3)	2-4	200	50 PPM	No	3	No
Polyvinyl Chloride Resin* (ND)	12-14	NE	NE	ND	ND	ND

Conversion: 1 ppm = 4.75 mg/m3
* Proprietary adhesive

Section 3: Hazard Identification

Emergency overview
Appearance: Clear to hazy viscous liquid.
Immediate effects: ND
Potential health effects
Primary Routes of entry: Dermal, Inhalation, ingestion.
Signs and Symptoms of Overexposure: ND
Eyes: Severe irritation, redness, tearing blurred vision.
Skin: Moderate irritation, defatting dermatitis.
Ingestion: Gastrointestinal irritation, nausea, vomiting, and diarrhea.

Inhalation: Nasal and respiratory irritation, dizziness, fatigue, nausea, headache and narcosis. Prolonged or repeated breathing of high concentrations may cause liver and kidney damage and neural dysfunction.
Chronic Exposure: ND
Chemical Listed As Carcinogen Or Potential Carcinogen: Toluene
See Toxicological Information (Section11)
Potential environmental effects
See Ecological Information (Section 12)

Section 4: First Aid Measures
If accidental overexposure is suspected
Eye(s) Contact: Flush with water for at least 15 minutes. Get medical attention.
Skin Contact: Wash thoroughly with soap and water. Remove all contaminated clothing.
Inhalation: Remove to fresh air. If breathing difficult administer oxygen. If breathing has stopped give artificial respiration. Call a physician.
Ingestion: Do not induce vomiting. Call a Physician
Note to physician
Treatment: ND
Medical Conditions generally Aggravated by Exposure: No known information.

Section 5: Fire Fighting Measures
Flash Point: 21°F, TCC
Flammable Limits: LEL: 1.2
Auto-ignition point: ND
Fire Extinguishing Media: Foam, "Alcohol" Foam, CO_2, Dry Chemical, Water Fog.
Special Fire Fighting Procedures: Wear self contained breathing apparatus.
Unusual Fire and Explosion Hazards: Closed containers may explode if exposed to temperatures exceeding the boiling point. Use water spray to keep closed containers cool.
Hazardous combustion products: Carbon dioxide and carbon monoxide.
DOT Class: Flammable

Section 6: Accidental Release Measures
Steps to be Taken in Case Material is Released or Spilled: Eliminate all ignition sources immediately. Dike large spills. Collect with vermiculite or other absorbent material. If TLV is exceeded personnel should wear air supplied respirator or for large spills impervious clothing and boots are advised.
Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage
Precautions to be Taken in Handling and Storage: Store in cool dry place. Keep away from heat, sparks, flame.
Storage temperature: Room temperature.
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Sufficient mechanical ventilation should be provided to maintain exposure below TLV.

Personal Protection Equipment

Respiratory protection: If the TLV is exceeded a NIOSH/MSHA approved air supplied respirator is advised.
Protective gloves: Natural rubber or neoprene.
Skin protection: Gloves and protective clothing.
Eye protection: Chemical splash goggles are advised.
Additional clothing and/or equipment: Eyewash advised. Remove any contaminated clothing. Wash hands thoroughly before eating or smoking.

Exposure Guidelines

See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Clear to hazy viscous liquid.
Odor (threshold): Sharp pungent odor.
Specific Gravity (H_2O=1): 0.85
Vapor Pressure (mm Hg): 71 @ 20°C
Vapor Density (air=1): >1
Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): >2
Boiling Point: 174°-246°F
Freezing point / melting point: ND
pH: NA
Solubility in Water: Partial
Molecular Weight: NA

Section 10: Stability and Reactivity

Stability: Stable.
Conditions to Avoid: Temperatures exceeding 150°F
Materials to Avoid (Incompatibility): Oxidizing Agents.
Hazardous Decomposition Products: Fire conditions, Carbon dioxide and carbon monoxide.
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Results of component toxicity test performed: Methyl Ethyl Ketone (78-93-3): LD50 Oral (rat) 2,737 mg/kg. Inhalation LC50 (Mouse):4 hr at 32,000 mg/m3. LC50 Inhalation (Mammal): 38,000 mg/m3. Dermal LD50 (rabbit): 6,480 mg/kg
Iso-butyl Acetate (110-19-0): LD50 Oral (rat):13,400 mg/kg. Inhalation LC50: no data available. Dermal LD50 (rabbit): > 17,400 mg/kg.
Toluene (108-88-3): Acute oral toxicity LD50 (Rat): 636 mg/kg. Acute dermal toxicity LD50 (Rabbit):14100 mg/kg. Acute toxicity of the vapor LC50 (Mouse):440 24 hours.

Proprietary adhesive: ND
Human experience: ND
This product **does** contain compounds listed by NTP or IARC or regulated by OSHA as a carcinogen. Toluene (108-88-3)

Section 12: Ecological Information
Ecological Information: ND
Chemical Fate Information: ND

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: ND
Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information
US DOT Information: Proper shipping name: Flammable liquid, n.o.s. (Methyl ethyl Ketone solution)
Hazard Class: 3
Packaging group: III
UN Number: UN1993
IATA: Proper shipping name: Flammable liquid, n.o.s. (Methyl ethyl Ketone solution)
Hazard Class: 3
Packing group: III
UN Number: UN1993
IMO: Proper shipping name: Flammable liquid, n.o.s. (Methyl ethyl Ketone solution)
Class: 3
UN Number: UN1993
Packing group: III
Marine Pollutant: No
Canadian TDG: Flammable liquid, n.o.s. (Methyl ethyl Ketone solution)

Section 15: Regulatory Information
United States Federal Regulations
MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.
SARA: ND
SARA Title III: ND
RCRA: ND
TSCA: All components are listed
CERCLA: ND
State Regulations
California Proposition 65: This product contains Chemical(s) known to the State of California to cause reproductive harm: Toluene (108-88-3)
International Regulations
Canada WHMIS: ND
Europe EINECS Numbers: ND

Section 16: Other Information

Label Information: Harmful by inhalation, ingestion and skin contact
European Risk and Safety Phrases: ND
European symbols needed: ND
Canadian WHMIS Symbols: ND
Hazard Rating: Health: **2**; Fire: **3**; Reactivity: **0**
Estimated Hazard Rating.
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Abbreviations used in this document

NE= Not established
NA= Not applicable
NIF= No Information Found
ND= No Data

Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.