TED PELLA, INC.
Microscopy Products for Science and Industry

Safety Data Sheet
Product No. 18174 MonoStep® Lowicryl® HM-20, Non-Polar Embedding Media
Issue Date (11-15-13)
Review Date (08-31-17)

Section 1: Product and Company Identification

Product Name: MonoStep® Lowicryl® HM-20, Non-Polar Embedding Media
Synonym: None
Company Name
Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477
Inside USA and Canada 1-800-237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
Outside USA and Canada 1-530-243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)
CHEMTREC USA and Canada Emergency Contact Number 1-800-424-9300 24 hours a day
CHEMTREC Outside USA and Canada Emergency Contact Number +1-703-741-5970 24 hours a day

Section 2: Hazard Identification

GHS Pictograms:


Flammable Irritant

GHS Categories:
Causes skin and eye irritation.
Flammable liquid and vapor.
May cause allergic skin reaction.

Flammable Liquids Category 3
Skin Irritant Cat 2, Eye Irritation Cat 2B
Skin Sensitizer Category 1B

Signal Word: DANGER

Hazard and Precautionary Statements:

H226	Flammable liquid and vapor.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P280A	Wear protective gloves
P285	In case of inadequate ventilation wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305B	IF IN EYES: Separate eyelids with finger tips.
P315	Get immediate medical advice/attention.
P351	Rinse cautiously with water for several minutes.

Health Effects:
NFPA Hazard Rating: Health: 1; Fire: 3; Reactivity: 0
HMIS® Hazard Rating: Health: 1; Fire: 3; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment: A chemical safety assessment has not been carried out.
PBT: ND
vPvB: ND

Emergency overview:
Appearance: Colorless liquid.
Immediate effects: Skin irritant.
Potential health effects
Primary Routes of entry: Skin and eye contact.
Signs and Symptoms of Overexposure: ND
Eyes: Causes eye irritation.
Skin: May cause an allergic skin reaction.
Ingestion: ND
Inhalation: ND
Chronic Exposure: ND
Chemical Listed As Carcinogen Or Potential Carcinogen: No
See Toxicological Information (Section11)
Potential environmental effects
See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) **(Cas. No)**	**%**	**OSHA PEL mg/m3**	**ACGIH TLV mg/m3**	**NTP** Carcinogen	**IARC** Carcinogen	**OSHA regulated** Carcinogen
2-Propenoic acid, 2-methyl, 1,2-ethanediylbis(oxy-2,1-ethanediyl)ester (109-16-0) EINECS: 203-652-6	6-10	NE	NE	No	No	No
2-Propenoic acid, 2-methyl-, ethyl ester (97-63-2) EINECS: 202-597-5	71-80	NE	NE	No	No	No
4-Methoxyphenol (150-76-5) EINECS: 205-769-8	0-5	NE	5 ppm	No	No	No
Acetophenone, 2-methoxy-2-phenyl (3524-62-7) EINECS: 222-538-7	0-5	NE	NE	No	No	No
n-Hexyl methacrylate (142-09-6) EINECS: 205-521-9	11-20	NE	NE	No	No	No

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Section 4: First Aid Measures
If accidental overexposure is suspected
Contact medical personnel immediately.
Eye(s) Contact: Flush eyes with flowing water for at least 15 minutes. Separate eyelids with finger tips.

Skin Contact: Wash skin with deluge of water for at least 15 minutes.
Inhalation: Contact medical personnel.
Ingestion: If swallowed, wash out mouth with water if person is conscious. Contact medical personnel.

Note to physician

Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: 64°F
Flammable Limits: LEL: 1.8. UEL: ND.
Auto-ignition point: 739°F
Fire Extinguishing Media: Carbon dioxide, dry chemical powder, and alcohol resistant foam.
Special Fire Fighting Procedures: Firefighters must wear self-contained breathing apparatus and fully protective equipment.
Unusual Fire and Explosion Hazards: ND
Hazardous combustion products: None
DOT Class: Flammable liquid.

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel. Remove ignition sources.
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:
Storage temperature: Store at 4 deg. C.
Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Use process enclosures, local exhaust ventilation, or other engineering controls.

Personal Protection Equipment

Respiratory protection:
Protective gloves: Use latex or equivalent gloves. Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product. Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product. Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task
Eye protection: Use chemical splash goggles and face shield.
Additional clothing and/or equipment: ND

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Colorless liquid
Odor (threshold): ND

Specific Gravity (H_2O=1): 0.91
Vapor Pressure (mm Hg): 21.3mbar
Vapor Density (air=1): >1
Percent Volatile by volume: ND
Evaporation Rate (butyl acetate=1): ND
Boiling Point: 246°F
Freezing point / melting point: -103°F
pH: ND
Solubility in Water: slight
Molecular Weight: NA

Section 10: Stability and Reactivity
Stability: Stable under normal conditions.
Conditions to Avoid: Heat, ignition sources
Materials to Avoid (Incompatibility): oxidizers, initiators
Hazardous Decomposition Products: None
Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information
Results of component toxicity test performed:
Acute Data: LD (oral rat) 13424 mg/kg; LD50 (dermal rabbit) >9100 mg/kg; LC50 (inhalation rat) 8300 ppm/4H
Sub chronic data: Tests positive as mutagen on laboratory animals.
Human experience: ND
This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

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

Section 13 Disposal Considerations
RCRA 40 CFR 261 Classification: U118 (Ethyl methacrylate cas#: 97-63-2)
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: Resin Solution
Hazard Class: 3
Packaging group: II
UN Number: UN1866
IATA: Proper shipping name: Resin Solution
Hazard Class: 3
Packing group: II
UN Number: UN1866
Marine Pollutant: No
Canadian TDG: Proper shipping name: Resin Solution

Section 15: Regulatory Information

United States Federal Regulations
MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.
SARA: Substance is not listed.
SARA Title III: Substance is not listed.
RCRA: U118 Ethyl methacrylate (97-63-2)
TSCA: All components are listed.
CERCLA: 2-Propenoic acid, 2-methyl, ethyl ester (97-63-2) RQ: 1,000 lbs, Ethyl methacrylate (97-63-2) RQ: 1,000 lbs
State Regulations
California Proposition 65: Substance is not listed.
International Regulations
Canada WHMIS: ND
Europe EINECS Numbers: 2-Propenoic acid, 2-methyl, 1,2-ethanediylbis(oxy-2,1-ethanediyl)ester EINECS: 203-652-6, 2-Propenoic acid, 2-methyl-, ethyl ester EINECS: 202-597-5, 4-Methoxyphenol EINECS: 205-769-8, Acetophenone, 2-methoxy-2-phenyl
EINECS: 222-538-7, n-Hexyl methacrylate EINECS: 205-521-9

Section 16: Other Information
Label Information: Flammable liquid, Irritant
European Risk and Safety Phrases: ND
European symbols needed: F, Xn
Canadian WHMIS Symbols: ND
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.