TED PELLA, INC.
Microscopy Products for Science and Industry

Material Safety Data Sheet

Product No. 18393 Paraplast® Plus
Issue Date (02-14-06)
Review Date (06-01-12)

Section 1: Product and Company Identification

Product Name: Paraplast® Plus
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 PEL mg/m3	ACGIH TLV mg/m3	NTP	IARC	OSHA regulated
Paraffin (Paraffin wax) (8002-74-2)	>75	2*	2*	No	No	No
Dimethylsulfoxide (DMSO) (67-68-5)	<1	NE	NE	No	No	No

* The Occupational Safety and Health Administration (OSHA) and the American Conference of Governmental Industrial Hygienists (ACGIH) have not established exposure limits for this product. However, exposure limits do exist for the hazardous ingredient, which is present at greater than 98%: Paraffin fume.

Section 3: Hazard Identification

Emergency overview
Appearance: Waxy pellets.
Immediate effects: Not expected to present any physical or environmental concerns for emergency personnel. The acute health effects associated with paraffin include skin and eye irritation.
Potential health effects
Primary Routes of entry: Skin, eyes and inhalation.
Signs and Symptoms of Overexposure: ND
Eyes: May cause mild eye irritation.
Skin: May cause mild skin irritation.

Ingestion: The product is not expected to present a hazard from ingestion. No data were available on the health effects of paraffin from this route of exposure.
Inhalation: Inhalation of paraffin wax fumes (for example, when the wax is heated) may irritate the eyes, nose, and throat.
Chronic Exposure: May cause dermatitis with irritation and rash.
Chemical Listed As Carcinogen Or Potential Carcinogen: No human or animal data were available on the carcinogenic effects following oral or inhalation exposure. However, when implanted in experimental animals, paraffin caused tumors of the bladder and of the respiratory system.
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: First check the victim for contact lenses and remove if present. Immediately flush eyes with plenty of water or normal saline for at least 15 minutes while holding eyelids open. If symptoms such as redness or irritation develop or persist, get immediate medical attention. Do not put any medication in the victim's eyes unless instructed by a physician.
Skin Contact: Remove and isolate contaminated clothing. Wash skin with soap and flush thoroughly with plenty of water. Obtain medical attention if irritation develops, or other symptoms occur. Clean contaminated clothing before reuse or dispose of properly.
Inhalation: Remove exposed subject to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, administer oxygen (by trained personnel only). Keep subject warm. Get immediate medical attention.
Ingestion: If swallowed, Do NOT induce vomiting. If the subject is conscious, give them 1 or 2 glasses of water to dilute the chemical. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. If the victim is unconscious, keep their airway open and lay the victim on their side with the head lower than the body. Get immediate medical attention.

Note to physician

Treatment: ND
Medical Conditions generally Aggravated by Exposure: ND

Section 5: Fire Fighting Measures

Flash Point: 390° F (199° C) Methods: Closed Cup.
Flammable Limits: ND
Auto-ignition point: 473° F (245° C) (for 100% paraffin).
Fire Extinguishing Media: ND
Special Fire Fighting Procedures: Keep unnecessary people away; isolate hazard area and deny entry. Remove containers exposed to fire if possible, otherwise cool them from the side with water spray. Emergency equipment including self-contained breathing apparatus (SCBA) and full fire fighting turnout gear should be worn by fire fighters. For fires involving this product or its packaging material, use an extinguisher which is

appropriate for combustibles and surrounding classes of fire.
Unusual Fire and Explosion Hazards: ND
Hazardous combustion products: Fires of paraffin wax may produce toxic fumes.
DOT Class: Not regulated.

Section 6: Accidental Release Measures
Steps to be Taken in Case Material is Released or Spilled: Follow facility-specific procedures for spill response. Isolate the spill area. When cleaning spills, wear appropriate personal protective equipment including: safety glasses and chemical resistant gloves. Confine and contain small spills using inert material (e.g., paper towels, spill control pillows). If the wax is hot, let cool before initiating clean-up. To clean-up spills of cooled wax, use non-sparking tools to scrape the wax into containers suitable for disposal.
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: Keep containers closed when not in use. Store in a cool, dry, well ventilated area.
Storage temperature: ND
Storage Pressure: ND

Section 8: Exposure Controls / Personal Protection
Engineering Controls
Ventilation required: No specific controls are needed; good general room ventilation expected to be adequate to control airborne levels. If certain operations generate vapors or fumes (i.e., heating the paraffin), use adequate general or local ventilation to keep airborne concentrations below exposure limits.
Personal Protection Equipment
Respiratory protection: ND
Protective gloves: Wear impervious gloves to prevent skin contact.
Skin protection: Lab coat, apron or other impermeable clothing may be appropriate.
Eye protection: Safety glasses with side shields or goggles should be worn when handling this material.
Additional clothing and/or equipment: ND
Exposure Guidelines
See Composition/Information on Ingredients (Section2)

Section 9 Physical and Chemical Properties
Appearance and Physical State: Colorless or white, translucent, waxy pellet.
Odor (threshold): Garlic odor
Specific Gravity (H_2O=1): 0.80
Vapor Pressure (mm Hg): ND
Vapor Density (air=1): ND
Percent Volatile by volume: NA

Evaporation Rate (butyl acetate=1): NA
Boiling Point: ND
Freezing point / melting point: 117 – 149° F (47 – 65° C), depending on grade
pH: ND
Solubility in Water: Insoluble.
Solubility other: Insoluble in alcohol; soluble in benzene, chloroform, ether, carbon disulfide, and oils; miscible with fats.
Molecular Weight: ND

Section 10: Stability and Reactivity
Stability: Stable under normal conditions of use and when stored at room temperature.
Conditions to Avoid: Avoid heat, high temperatures, pressure, mechanical shock or other conditions that might result in a hazardous situation.
Materials to Avoid (Incompatibility): There are no known materials which are incompatible with this product. Paraffin is incompatible with strong reducing agents and strong acids.
Hazardous Decomposition Products: Thermal oxidative decomposition of paraffin wax emits toxic fumes.
Hazardous Polymerization: Will not occur

Section 11: Toxicological Information
Results of component toxicity test performed: This product is a mixture for which no toxicological data exists, a low order of acute toxicity predicted. Components: Paraffin: A 100mg dose applied to the rabbit eye for 24 hours caused mild irritation. A 500mg dose applied to rabbit skin for 24 hours caused mild irritation. Chronic Toxicity/Carcinogenic Effects Data: Paraffin: When implanted in rats (120 mg/kg) and mice (480-66 mg/kg), caused tumors of the bladder, lungs, and thorax.
Dimethylsulfoxide: Oral LD50 (rat): 17.9 ml/Kg
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: Not listed.
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: Not regulated
IATA: Proper shipping name: Not regulated
IMO: Proper shipping name: Not regulated
Marine Pollutant: No

Canadian TDG: This product is not regulated under international transportation regulations.

Section 15: Regulatory Information
United States Federal Regulations
MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.
SARA: No
SARA Title III: Not listed.
RCRA: Not listed.
TSCA: This product contains materials that are listed on the EPA TSCA Chemical Inventory.
CERCLA: Not listed.
State Regulations
California Proposition 65: No
International Regulations
Canada WHMIS: ND
Europe EINECS Numbers: Paraffin wax (8002-74-2): EINECS#: 232-315-6.
Dimethylsulfoxide (67-68-5): EINECS#: 200-664-3.

Section 16: Other Information
Label Information: ND
European Risk and Safety Phrases: ND
European symbols needed: ND
Canadian WHMIS Symbols: ND
Hazard Rating: Health: **1**; Fire: **1**; Reactivity: **0**
(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
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