

## Section 1. Other Information

### Product Identifiers

Name PureAffin® R53™  
Number EEPAR53  
Category Paraffin Wax

**Recommended Use** Infiltration and embedding low melting point medium for use in all automated processors and embedding centers.

**Manufacturer Details** Cancer Diagnostics, Inc.  
116 Page Point Circle  
Durham, NC 27703  
Tel: 877-846-5393  
[www.cancerdiagnostics.com](http://www.cancerdiagnostics.com)

**Emergency Telephone** USA and Canada: 1-800-424-9300 (CHEMTREC)  
International: 1-352-323-3500 (INFOTRAC)  
Poison Control: 1-800-222-1222

**Date Prepared** May 30, 2017

## Section 2. Other Information

**Classification of the substance or mixture:** Not a hazardous substance or mixture.

**GHS label elements and precautionary statements:** Not a hazardous substance or mixture.

**Hazards not otherwise classified or not covered by GHS.**

The product contains no substances which at their given concentration, are considered to be hazardous to health. This material is a non-hazardous solid at room temperature. Above its softening point, the material requires caution in handling. At elevated temperatures well above the softening point and in contact with air, the generation of hydrocarbon vapors including possible oxidized products may be expected. Molten product can cause skin burns, irritate eyes and cause mild respiratory irritation.

HMIS Rating: Health: 1 Flammability: 1 Reactivity: 0

NFPA Rating: Health: 1 Flammability: 1 Reactivity: 0

## Section 3. Composition and Information on Ingredients

Component	CAS #	Concentration %
Paraffin Wax (petroleum), hydrotreated	64742-51-4	93

The above chemistry is provided for industrial hygiene and environmental purposes and are not intended to represent product specifications. No ingredients are hazardous according to OSHA criteria. No components need to be disclosed according to the applicable regulations.

## Section 4. First Aid Measures

### Description of first aid measures

**General Advice:** This material is a non-hazardous solid at room temperature. Above its softening point, the material liquefies and flows more readily as the temperature increases. At elevated temperatures well above the softening point and in contact with air, the generation of hydrocarbon vapors including possible oxidized products may be expected.

**Eye Contact:** Exposure to fumes, vapors or smoke of overheated product can result in irritation to eyes. Direct contact with molten material will cause eye injury and burns. When handling molten material eye shields must be worn at all times. In case of contact, flush eyes with generous amounts of water for at least 15 minutes. Administer prompt first aid measures. Call a physician to attend the injury.

**Skin Contact:** Exposure to fumes, vapors or smoke of thermally degraded product can result in irritation to skin. Direct contact of the molten material will cause injury and burns. For burns apply running water to the injured area for 15 minutes. Do not attempt to remove any material bonded to skin. Call a physician to attend the injury.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. (Get medical attention immediately if symptoms occur).

**Ingestion:** Clean mouth with water and drink plenty of water afterwards.

**Most important symptoms and effects, both acute and delayed:** See Sections 2 and 11.

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically.

## Section 5. Fire- Fighting Measures

### Extinguishing Media

**Suitable Extinguishing Media:** In case of fire, use water fog, dry chemical, CO<sub>2</sub> or "alcohol resistant" foam, Cool containers with flooding quantities of water until well after fire is out

**Unsuitable Extinguishing Media:** Avoid solid water stream as it may scatter and spread fire.

**Special hazards arising from the substance or mixture:** Use water spray to cool fire exposed container surfaces and to protect personnel. Thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).

**Advice for firefighters:** As in any fire, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. (MSHA/NIOSH approved or equivalent).

**Further information:** If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA Fire Brigades Standard (29 CFR 1910.156).

## Section 6. Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Use appropriate safety equipment. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Ventilate area of leak or spill. No smoking in area. For large spills, warn public of downwind explosion hazard.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**Methods and materials for containment and cleaning up:** Handle as a thermoplastic. With molten spills, allow the material to solidify and cool. Keep material out of sewers and waterways by diking or impounding. Recover and place into appropriate containers for recycling or disposal, according to prevailing local, state and federal laws. Ensure adequate ventilation, especially in confined areas.

**Reference to other sections-resources:** For additional information, refer to Section 8, Exposure Controls and Personal Protection, Section 7, Handling, Section 12, Ecological Information and Section 13, Disposal Considerations. If employees are required to clean-up spills, they must be properly trained and equipped. The OSHA Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120) may apply.

## Section 7. Handling and Storage

**Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety practice. Use caution when handling product in its molten state and wear appropriate PPE per Section 8.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Avoid temperature extremes. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**Specific end use:** See Section 1.

## Section 8. Exposure Controls/Personal Protection

### Control parameters

Exposure limits are for air levels only. Skin contact can cause over exposure even with the following limits are met. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or

smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

**Components with workplace control parameters**

Paraffin waxes (64742-51-4): (Wax Fumes) TWA 2 mg/m<sup>3</sup> ACGIH (TLV) TWA 2 mg/m<sup>3</sup> NIOSH TWA 2 mg/m<sup>3</sup> ACGIH

**Exposure controls**

Appropriate engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

**Personal protective equipment**

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good practices. Wash and dry hands. If product is hot, thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

General: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Control of environmental exposure**

Do not let product enter drains. Discharge into the environment must be avoided.

**Section 9. Physical and Chemical Properties****Information on basic physical and chemical properties**

Physical State: Solid

Color: Colorless

Odor: Mild

Odor Threshold: N/D

**Health, Safety and Environment Information**

Relative Density (at 15 °C): 0.83

Flammability (Solid, Gas): N/A

Flash Point [Method]: 204°C (399°F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/D

Boiling Point / Range: > 316°C (601°F) [Estimated]

Decomposition Temperature: N/D

Vapor Density (Air = 1): N/D

Vapor Pressure: < 0.013 kPa (0.1 mm Hg) at 20 °C [Estimated]

Evaporation Rate (n-butyl acetate = 1): N/D

pH: N/A

Log Pow (n-Octanol/Water Partition Coefficient): > 6 [Estimated]

Solubility in Water: Negligible

Viscosity: [N/A at 40 °C] | 3.4 cSt (3.4 mm<sup>2</sup>/sec) at 100°C

Oxidizing Properties: See Hazards Identification Section.

**Other Safety Info:**

Freezing Point: N/D

Melting Point: 53°C (127°F)

Physical Data is typical values based on material tested but may vary based on composition. Values should not be accepted as guaranteed for every lot or as specifications for this product.

## Section 10. Stability and Reactivity

**Reactivity:** Not reactive under normal conditions.

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** When in contact with incompatible materials.

**Conditions to avoid:** Contact with incompatible materials and temperature extremes.

**Incompatible materials:** Strong oxidizers.

**Hazardous decomposition products:** Does not decompose under normal conditions.

**Other decomposition products:** During fire, thermal decomposition can produce carbon monoxide (highly toxic) and carbon dioxide (an asphyxiant at sufficient concentrations).

## Section 11. Toxicological Information

### Information on Toxicological Effects

#### Acute Toxicity

Paraffin Wax (petroleum), hydrotreated (64742-51-4):

Acute Oral Toxicity: LD50 Oral - Rat - male and female - > 5,000 mg/kg (OECD Test Guideline 401)

Acute Dermal Toxicity: LD50 Dermal - Rabbit - > 3,600 mg/kg LC50

Skin corrosion/irritation - Inhalation - Serious eye damage/eye irritation - Respiratory or skin sensitization - Germ cell mutagenicity - Reproductive toxicity - Specific target organ toxicity - single exposure - Specific target organ toxicity - repeated exposure - Aspiration hazard: All no data available.

Carcinogenicity: Product not classified as a carcinogen by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or the Occupational Safety and Health Administration (OSHA). Petroleum wax is not carcinogenic in lifetime animal skin painting or oral feeding studies. Did not cause mutations in vitro. High oral doses in one rat strain (F-344) resulted in microscopic inflammatory changes (microgranulomas) in liver, spleen, and lymph nodes, some increased organ weights, inflammation of the cardiac mitral valve, and accumulation of saturated mineral hydrocarbons in certain tissues. Non-sensitizing in animal tests and human subjects.

**Additional Information:** None known.

## Section 12. Ecological Information

### Ecotoxicity

#### Component ecotoxicity

Paraffin Wax (petroleum), hydrotreated (64742-51-4): Not Determined

#### Mixture ecotoxicity

Toxicity to Fish: Not Determined

Persistence and Biodegradability: Not Determined

Bioaccumulative Potential: Not Determined

Mobility in Soil: Not Determined

**Other adverse effects:** None known.

## Section 13. Disposal Considerations

### Waste treatment methods

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging:** Dispose of as unused product.

**Section 14. Transport Information**

<b>14.1 UN Number</b> DOT, IATA,IMDG, ADR	DOT: Not dangerous goods. ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.
<b>14.2 UN Proper Shipping Name</b> DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.3 Transport Hazard Class(es)</b>	<b>DOT:</b> Not dangerous goods. <b>IATA:</b> Not dangerous goods. <b>IMDG:</b> Not dangerous goods. <b>ADR/RID:</b> Not dangerous goods.
<b>14.4 Packing Group</b> DOT, IATA,IMDG, ADR	ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods. DOT: Not dangerous goods.
<b>14.5 Environmental Hazards</b>	<b>Marine Pollutant:</b> No
<b>14.6 Special Precautions for User</b>	Not applicable.
<b>14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code.</b>	This product is not intended to be transported in bulk as defined in Annex II of MARPOL73/78 and the IBC Code.

**Section 15. Regulatory Information**
**Federal**

TSCA: Components of this product are listed on the TSCA Inventory.

DSL: This product, or its components, are listed on or are exempt from the Canadian Domestic Substances List (DSL).

CERCLA: Product is not found in "List of Hazardous Substances and Reportable Quantities" (40 CFR 302.4

SARA TITLE III: (Superfund Amendments and Reauthorization Act)

302 Components: None are subject to the reporting requirements of Section 302.

313 Components: None that exceed the threshold (De Minimis) reporting levels established by Section 313.

311/312 Hazards: Acute, Health

**States**

State Right to Know Components: PA and NJ: Paraffin Wax (petroleum), hydrotreated (64742-51-4)

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Canada**

WHMIS: This product is not a controlled product under WHMIS.

**Section 16. Other Information**

**Revision Date:** 2020-03-05

**Notice to Reader:**

*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.*