

Ransom & Randolph

1. Product and Company Identification

<i>Product Name</i> R&R® AquaSphere™ injection wax	<i>MSDS Code Number</i> 287
<i>Trade Name & Synonyms</i>	<i>Date of Last Revision</i> 11/2006
<i>Chemical Name</i>	<i>Manufacturer/Supplier</i> Ransom & Randolph
<i>C.A.S. Number</i>	<i>Address</i> 3535 Briarfield Blvd, Maumee, OH 43537
<i>Grades or Minor Variant Identities</i>	<i>Information Telephone Number</i> 419/865-9497 FAX 419/865-9997
<i>Product Use</i> Jewelry wax	<i>Emergency Telephone Number</i> 419/865-9497

2. Composition

<u>Hazardous Components</u>	<u>C.A.S. Number</u>	<u>%</u>
Blend of wax, resin and polymer		100%

3. Hazardous Identification*Emergency Overview*

N/A

<i>Routes of Exposure</i>	<i>Signs & Symptoms</i>	<i>Single, Repeated, or Lifetime Exposure</i>	<i>Severity (Mild, Moderate, Severe)</i>	<i>Acute and Chronic Health Effect(s)</i>	<i>Target Organ(s)</i>
<i>Eye</i>	Fumes from molten product may cause irritation. Contact with molten product may cause severe thermal burns.				
<i>Skin</i>	Contact with molten wax may cause severe thermal burns.				
<i>Inhalation</i>	Product dust may cause respiratory tract irritation. Molten wax may cause irritation to the respiratory tract.				
<i>Ingestion</i>	Low order of acute systematic toxicity.				
<i>Other</i>					

<i>Medical Conditions Aggravated by Exposure</i> N/A			
<i>Carcinogenicity (IARC, NTP)</i>			
<i>Potential Environmental Effects</i>			
4. First Aid Measures			
<i>Routes of Exposure</i>	<i>First Aid Instructions</i>	<i>Immediate Medical Attention</i>	<i>Delayed Effects</i>
<i>Eye</i>	Ambient wax – flush wax particles with tepid water.	Hot wax – seek medical attention.	
<i>Skin</i>	Ambient wax – wash with soap and water.	Molten wax – cool wax immediately – do not remove wax from skin. Seek medical attention.	
<i>Inhalation</i>	When fume or mist occurs remove to fresh air.	If person is not breathing, provide oxygen or artificial respiration. Seek medical attention.	
<i>Ingestion</i>	Small quantities – permit to pass through system.	Large quantities – seek medical attention.	
<i>Other</i>			
<i>Note to Physicians (Treatment, Testing, and Monitoring)</i> N/A			
5. Fire and Explosion Data			
<i>Flashpoint: (Method)</i> >200 C (COC, ASTM D-92)	<i>Flammable (Explosive) Limits in Air</i> LEL: UEL:		<i>Autoignition Temperature:</i> ND
<i>Flame Propagation or Burning Rate (for solids):</i>	<i>Properties Contributing to Fire Intensity</i>	<i>Flammability Classification NFDA Rating:</i>	<i>Other</i>
<i>Extinguishing Media</i> Use water fog, alcohol-type foam, dry chemical, or CO2. Do not use direct stream of water.		<i>Extinguishing Media to Avoid</i>	
<i>Protection and Procedures for Firefighters:</i> Firefighters should wear proper protective equipment and self-contained breathing apparatus with full-face piece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.			
<i>Unusual Fire and Explosion Hazards:</i> As with most solid or particulate organic material, extremely high dust concentration in air may result in a potential fire hazard. Good housekeeping practices will prevent any significant accumulations.			

6. Accidental Release Measures

Containment Techniques

Spill/Leak Clean-Up Procedures and Equipment

Sweep up material and place in appropriate disposal container. If molten wax-contain spill as much as possible and let molten wax cool. Once solid, place material in appropriate disposal container.

Evacuation Procedures

Special Instructions

Reporting Requirements

7. Handling and Storage

Handling Practices and Warnings

Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

Storage Practices and Warnings

8. Exposure Controls/Personal Protection

Ventilation

Other Engineering Controls

Good ventilation should be sufficient to control airborne levels. Do not let molten product stand unused in melt tanks and injection machines. Stir molten product at all times. Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

Routes of Entry:

Personal Protective Equipment (PPE) for Normal Use:

PPE for Emergencies:

Eye/Face

Safety glasses with side shields (or goggles) and a face shield.

Skin

Inhalation

Normally none required. For mist and fumes use approved NIOSH/MSHA organic respirator.

General Hygiene Considerations and Work Practices

Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the restroom facilities

Other Protective Measures and Equipment

9. Physical and Chemical Characteristics

Appearance

Waxy solid

Odor

Little or no odor.

Normal Physical State:

Liquid

Gas

Solid X

Boiling Point

660-730°F

Melting Point

153+/-6°F

Freezing Point

N/A

Specific Gravity or Density (H₂O=1)

~.960

Solubility in Water

Insoluble

pH

N/A

Vapor Pressure (mm Hg.)

N/A

Vapor Density (AIR = 1)

N/A

Evaporation Rate (Butyl Acetate=1)

N/A

<i>Other</i>			
10. Stability and Reactivity			
<i>Incompatibility (Materials to Avoid)</i>			
<i>Hazardous Products Produced During Decomposition</i> Carbon dioxide (Carbon monoxide with incomplete combustion)			
<i>Hazardous Polymerization?</i>	<i>May Occur</i>	<i>May Not Occur</i> X	<i>Conditions to Avoid</i>
<i>Stability?</i>	<i>Stable</i> X	<i>Unstable</i>	<i>Conditions to Avoid</i>
11. Toxicological Information			
<i>Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data</i> N/A			
12. Ecological Information			
<i>Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements</i> N/A			
13. Disposal Considerations			
<i>Regulations</i> Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.			
<i>Properties (Physical/Chemical) Affecting Disposal</i>			
14. Transport Information			
<i>Regulated for shipping?</i> Yes No X	<i>Proper Shipping Name</i>	<i>Packing Group</i>	
<i>Do changes in quality, packaging, or shipment method change product classification?</i> Yes No	<i>Hazard Class</i>	<i>Identification Number</i>	
<i>Other</i>			

15. Regulator Information

Federal Regulations

International Regulations

Other

16. Other Information

NFPA Hazard Rating	Health: 1	Flammability: 1	Reactivity: 0
HMIS Hazard Rating	Health: 1	Flammability: 1	Reactivity: 0
	Personal Protection:		

The information set forth herein has been gathered from standard reference materials and/or Ransom & Randolph Company test data and is, to the best knowledge and belief of Ransom & Randolph Company accurate and reliable. Such information is offered solely for your consideration, investigation and verification and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones which exist. Ransom & Randolph Company makes no warranties, express or implied, with respect to the use of such information or the use of the specific material identifies here in combination with any other material or process, and assumes no responsibility therefore.