

## SAFETY DATA SHEET

### RF AEROGEL

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#### 1. IDENTIFICATION

PRODUCT NAME: RF AEROGEL

MANUFACTURER/SUPPLIER INFORMATION:

Name: Aerogel Technologies, LLC  
Address: Boston, MA 02136  
Telephone: (888) X-AEROGEL  
(888) 923-7643  
Fax: (801) 650-1463  
Email: safety@aerogeltechnologies.com  
Emergency telephone: +1 (414) 944-0019

IDENTIFIED USE: Insulation, engineering material

RECOMMENDED RESTRICTIONS: None known

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#### 2. HAZARD(S) IDENTIFICATION

##### EMERGENCY OVERVIEW

OSHA Hazards: No known or identified OSHA hazards

GHS Hazards: No known or identified GHS dangerous substances

Hazard pictograms: Not applicable

##### HMIS CLASSIFICATION (scale 0-4):

Health Hazard: 0  
Flammability: 0  
Physical Hazards: 0

The production of this material uses precursors with the following GHS dangerous substance codes. All precursors are expected to be removed during processing, but this has not been confirmed at the time of publishing:

**PRECAUTIONARY HAZARDS:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

**POTENTIAL HEALTH EFFECTS:**

Inhalation Dust may be harmful if inhaled. May cause respiratory tract irritation.  
Ingestion Dust may be harmful if swallowed.

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### 3. COMPOSITION/INFORMATION OF INGREDIENTS

CHEMICAL NAME: Cured resorcinol-formaldehyde polymer

SYNONYM(S): RF, resorcinol-formaldehyde, phenolic

CAS-No.: N/A

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### 4. FIRST AID MEASURES

IF INHALED: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Seek medical advice.

IN CASE OF SKIN CONTACT: Wash off with soap and plenty of water. Seek medical advice.

IN CASE OF EYE CONTACT: Flush eyes with water as a precaution. Seek medical advice.

IF SWALLOWED: Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical advice.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:**

No further relevant information available

**INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:**

No further relevant information available

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## 5. FIREFIGHTING MEASURES

### SUITABLE EXTINGUISHING MEDIA:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### HAZARDOUS COMBUSTION PRODUCTS:

No data available. Treat material as having potential for emission of toxic gases upon combustion.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTING:

Wear self-contained breathing apparatus for firefighting if necessary.

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## 6. ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS:

Avoid formation of dust.

### ENVIRONMENTAL PRECAUTIONS:

Dispose of as with plastic waste. Material is non-recyclable. Non data on long-term environmental impact/dangers. Do not let material enter drains.

### METHODS/MATERIALS FOR CONTAINMENT AND CLEAN-UP:

Sweep up and shovel. Keep in suitable, closed containers for disposal.

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## 7. HANDLING AND STORAGE

### SAFE HANDLING PRECAUTIONS:

Provide appropriate exhaust ventilation at places where dust is formed. Normal measure for preventive fire protection.

### CONDITIONS FOR SAFE STORAGE:

Keep material in a tightly closed container, in a dry and well-ventilated place.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

The final material is not expected to contain any substances with occupational exposure limit values. No data is available at time of publication on residual precursors in material.

**PERSONAL PROTECTIVE EQUIPMENT:**

Respiratory protection:

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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 laboratory practices. Wash and dry hands.

Eye protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene protection:

General industrial hygiene practice.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:**

Form: solid  
Color: brown

**GENERAL INFORMATION:**

Melting point/freezing point:	No data available
Initial boiling point/boiling range:	No data available
Flash point:	No data available
Ignition temperature:	No data available
Auto-ignition temperature:	No data available
Evaporation rate	No data available

Decomposition temperature:	No data available
Flammability (solid, gas):	May form combustible dust concentrations in air
Lower explosion limit:	No data available
Upper explosion limit:	No data available
Vapor pressure:	<0.01 hPa (<0.01 mmHg) at 20 °C (68 °F)
Density:	(Specified for each density class) UL (typical value 0.03 g cm <sup>-3</sup> ) XL (typical value 0.08 g cm <sup>-3</sup> ) L (typical value 0.010 g cm <sup>-3</sup> ) M (typical value 0.20 g cm <sup>-3</sup> ) H (typical value 0.40 g cm <sup>-3</sup> ) XH (typical value 0.50 g cm <sup>-3</sup> )
Viscosity:	infinite (solid)
Water solubility:	insoluble
Partition coefficient:	No data available (n-octanol/water)
Odor:	odorless
Odor threshold:	No data available
pH value:	Not applicable

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## 10. STABILITY AND REACTIVITY

### CHEMICAL STABILITY:

Stable under recommended storage conditions

### POSSIBILITY OF HAZARDOUS REACTIONS:

No data available

### CONDITIONS TO AVOID:

No data available

### MATERIALS TO AVOID:

Strong oxidizing agents or substances that combine explosively with organic compounds.

### HAZARDOUS DECOMPOSITION PRODUCTS:

No data available.

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## 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY:**

Oral LD50:	No data available
Inhalation LC50:	No data available
Dermal LD50:	No data available
Other information on acute toxicity:	No data available

**SKIN CORROSION/IRRITATION:** No data available

**SERIOUS EYE DAMAGE/EYE IRRITATION:** No data available

**RESPIRATORY OR SKIN SENSITIZATION:** No data available

**GERM CELL MUTAGENICITY:** No data available

**CARCINOGENICITY:**

IARC:	No data available
ACGIH:	No data available
NTP:	No data available
OSHA:	No data available

**REPRODUCTIVE TOXICITY:** No data available

**TERATOGENICITY:** No data available

**SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE (GLOBALLY HARMONIZED SYSTEM):**  
No data available

**SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE (GLOBALLY HARMONIZED SYSTEM):**  
No data available

**ASPIRATION HAZARD:**  
No data available

**POTENTIAL HEALTH EFFECTS:**

Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed.
Skin:	May be harmful if absorbed through skin. May cause skin irritation.
Eyes:	May cause eye irritation.

Synergistic effects: No data available

ADDITIONAL INFORMATION:

RTECS: No data available

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## 12. ECOLOGICAL INFORMATION

TOXICITY:

No data available

PERSISTENCE AND DEGRADABILITY:

No data available

BIO-ACCUMULATIVE POTENTIAL:

No data available

MOBILITY IN SOIL:

No data available

PBT AND VPVB ASSESSMENT:

No data available

OTHER ADVERSE EFFECTS:

No data available

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## 13. DISPOSAL CONSIDERATIONS

PRODUCT:

Offer surplus and non-recyclable materials to a licensed disposal company.

CONTAMINATED PACKAGING:

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

UN number:

Not applicable

(DOT, AND, IMDG, IATA) UN proper shipping name: Not applicable  
(DOT, AND, IMDG, IATA) Transport hazard class(es): Not applicable  
(DOT, AND, IMDG, IATA) Packing Group: Not applicable  
(DOT, AND, IMDG, IATA) Environmental hazards: Not applicable  
Special precautions for user: Not applicable  
Transport in bulk (Annex II of MARPOL 73/78) Not applicable  
IBC Code Not applicable  
Marine Pollutant IMDG Code No

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## 15. REGULATORY INFORMATION

### OSHA HAZARDS:

No known hazards

### SARA 302 COMPONENTS:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 COMPONENTS:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 HAZARDS:

No SARA Hazards

### MASSACHUSETTS, PENNSYLVANIA, NEW JERSEY RIGHT TO KNOW COMPONENTS:

Component: Polyimide  
CAS: 62929-02-6

### CALIFORNIA PROP. 65 COMPONENTS:

To best of our knowledge, this product does not contain chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm

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## 16. OTHER INFORMATION

Date of preparation / last revision: 05/16/2018



**FURTHER INFORMATION:**

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