

1.1 **PRODUCT IDENTIFIER**

Artemis Nanotek™ RSM

1.2 **Intend Use of the Product:** Radiation Shielding

1.3 **Name, Address, and Telephone of the Responsible Party**

Manufacturer:

Artemis Shielding
2107 Gault Ave. North
Fort Payne, AL 35967
Phone (2560 979-1137
info@ artemisshielding.com

1.4 **Emergency Contact information**

Dr. Paul Fenelon (225) 979-1136

Section 2: Hazards identification

2.1 Classification of Substance or Mixture

Classification (GHS-US)
Not Classified

2.2 Label Elements

GHS-US Labeling
No Labeling required

2.3 OTHER HAZARDS. Under normal conditions of use and handling in the solid form substances cannot be released. Much of the information provided in the SDS is for situations of use in which hazardous exposures may occur, such as laser cutting or machining. In powdered form: Harmful to aquatic life with long lasting effects. Avoid release to the environment. Dispose of the contents/container in accordance with local, national, and international regulations.

Section 3: Composition/information on ingredients

3.1 Substance: Not applicable

Artemis Shielding

Safety Data Sheet

3.2 Hybrid Composite Mixture

Name	Product Identifier	Percentage	Classification (GHS-US)
X-Ray and Gamma Ray Attenuators Combinations of non-lead High Atomic no Elements including Iron, Zinc, Moly, Barium and its Salts, Tungsten, and Bismuth	Atomic Nos; 26, 30, 42, 56, 74, and 83	50 - 90	Not Classified
Polymer Matrix Polyamides, Polyesters and the like	Various	10 - 50	Not Classified
Physical Property Enhancers. Carbon Fiber, Glass Fiber, Mica, Calcium Carbonate, Amorphous Carbon and the like	Various	0 - 30	Not Classified

Section 4: Aid Measures

4.1 Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.
First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area.
First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes.
First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting.

Artemis Shielding

Safety Data Sheet

4.2 Most important symptoms and effects, both acute and delayed.

Symptoms/Injuries: Under normal conditions of use not expected to present a significant hazard. During processing or physical alternation, flakes or powder cause irritation of the respiratory tract, eyes, skin, and are harmful. Molten material may release toxic, and irritating fumes.
Symptoms/Injuries After Inhalation: For particulates and dust: May cause respiratory irritation.
Symptoms/Injuries After Skin Contact: For particulates and dust: May cause skin irritation.
Symptoms/Injuries After Eye Contact: For particulates and dust: May cause eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: None Known.

4.3 Indication of Any Immediate Medical Attention and Special treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

Section 5: Fire-Fighting Measures

5.1 Description of First Aid Measures

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media:

5.2 Special Hazards Arising from the Substance or Mixture

Fire Hazard: Product is not flammable. Under fire conditions, hazardous fumes will be present.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions are not expected to occur under normal conditions.

5.3 Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Do not breathe fumes of vapors from fire.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not allow product to spread into the environment.

6.2 Environmental Precautions Prevent entry to sewers and public waters

6.3 Methods and Material for Containment and Cleaning up

Methods for cleaning up: Clear up spills immediately and dispose of waste safely.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

7.3 Specific End Use(s) Electrometric attenuation.

Artemis Shielding

Safety Data Sheet

Section 8: Exposure Controls/Personal Protection

8.1 Exposure Controls

Appropriate Engineering Controls	Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
Personal protective Equipment	Not generally required. The use of personal protective equipment may be necessary as conditions warrant.
Materials for Protective Clothing	For particulates and dust: Chemically resistant materials and fabrics.
Hand Protection	For particulates and dust: Wear chemically resistant protective gloves.
Eye Protection	For particulates and dust: chemical safety goggles.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced approved respiratory protection should be worn.

Section 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical State	Solid
Appearance	Solid sheets and parts
Odor	Odorless
Odor Threshold	Odorless
pH	N/A
Evaporation Rate	N/A
Melting point	N/A
Freezing point	No Data Available
Boiling point	N/A
Flash point	N/A
Auto-ignition Temperature	No Data Available
Decomposition Temperature	No Data Available
Flammability (solid, gas)	No
Vapor Pressure	N/A
Relative Vapor Density at 20° C	N/A
Relative Density	N/A
Solubility	Negligible
Partition Coefficient: N-Octanol/Water	No Data Available
Viscosity	N/A

Artemis Shielding

Safety Data Sheet

9.2 **Other Information** No additional information available

Section 10: Stability and Reactivity

10.1 **Reactivity:** Hazardous reactions are not expected to occur under normal conditions

10.2 **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7)

10.3 **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

10.4 **Conditions to Avoid:** None known

10.5 **Incompatible Materials:** Oxidizers

10.6 **Hazardous Decomposition Products:** Thermal decomposition generates: Metal oxides. Chlorine gas

Section 11: Toxicological information

11.1 Information on Toxicological Effects

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/ Irritation: Not classified

Respiratory or Skin Sensitization: Not Classified
--

Germ Cell Mutagenicity: Not Classified

Carcinogenicity: Not Classified
--

Section 12: Ecological Information

12.1 **Toxicity** Not Applicable

12.2 **Persistence and Degradability** Not Established

12.4 **Mobility in Soil** No additional information available

12.5 **Other Adverse Effects**

Other Information	Avoid release to the environment
--------------------------	----------------------------------

Section 13: Disposal Considerations

13.1 Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

Section 14: Transport Information

14.1 In Accordance with DOT Not regulated for transport

14.2 In Accordance with IMFG Not regulated for transport

14.3 In Accordance with IATA Not regulated for transport

Section 15: Regulatory Information

15. US Federal and Other Regulations

15.1 TSCA – US Substance Control Act

High Atomic No. Elements and Physical Property Enhancers ie., Mica, Calcium Carbonate, Amorphous Carbon as powders are listed on US – TSCA. Not applicable to Artemis Products which are provided in solid forms.

15.2 California Proposition 65 (see attachment 1)

15.3 European ROHS (see attachment 2)

Section 16: Other Information, Including Date of Preparation or Last Revision

Revision Date	5/16/2017
Other Information	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
GHS Full Text Phrases:	
Comb. Dust	Combustible Dust
Comb. Dust	May form combustible dust concentrations in air

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



Attachment 1

2107 Gault Ave N.
Fort Payne Al, 36967

February 4, 2019

CALIFORNIA PROPOSITION 65 DECLARATION

Dear Concerned Parties,

This certificate is to inform Artemis Shielding concerned parties that items produced by Artemis Shielding do not contain chemicals which are listed on California's Safe Drinking Water & Toxic Enforcement Act of 1986. This Act, commonly known as Proposition 65 (Prop 65), establishes a list of chemicals which the state of California's risk assessment process has determined to present a risk of cancer, birth defects or other reproductive harm. The Proposition 65 chemical list can be found at:

<https://oehha.ca.gov/proposition-65/proposition-65-list>

Artemis Shielding is committed to providing safe, high quality products for our concerned parties. We have worked with our vendors and our supply chain partners to ensure the purchase of raw materials that will meet Prop 65 standards. Be assured, Artemis Shielding will continue to monitor the Proposition 65 regulations for any new chemicals. Artemis Shielding will compare any newly listed chemicals with the raw materials in our finished product and communicate this information to our concerned parties.

Sincerely

A handwritten signature in black ink, appearing to read 'Joe Priest', is written over a faint, light-colored background.

Joe Priest
Chief Operating Officer
2107 Gault Ave North
Fort Payne, AL 35967
Office: [\(256\) 979-1136](tel:2569791136)
Cell: [\(256\) 899-2117](tel:2568992117)
www.artemisshielding.com



Attachment 2

2107 Gault Ave North
Fort Payne, AL 35967

January 14, 2019
Subject: Declaration Letter

Dear Valued Customer

This is to certify that products offered by Artemis Shielding comply with the Reduction of Hazardous Substances under Directive (EU) 2015/863 and Directive 2011/65 EU. This directive restricts the acceptable levels of the following ten substances:

SUBSTANCE	SYMBOL	ACCEPTABLE CONCENTRATION	ACTURAL CONCENTRATION
Lead	Pb	<1000 ppm	0.00
Cadmium	Cd	<100 ppm	0.00
Mercury	Hg	<1000 ppm	0.00
Haxavalent Chromium	Cr[VI]	<1000 ppm	0.00
Polybrominated Biphenyls	PBB	<1000 ppm	0.00
Polybrominated Diphenyl Ethers including Deca-BDE	PBDE	<1000 ppm	0.00
Bis (2-Ethylhexy) phthalate	DEHP	<1000 ppm	0.00
Benzyl butyl phthalate	BBP	<1000 ppm	0.00
Dibutyl phthalate	DBP	<1000 ppm	0.00
Diisobutyl phthalate	DIBP	<1000 ppm	0.00

This certification of compliance and its accuracy are made on the certification/declaration documents of non-use of these substances provided by our subcontractors and internally at Artemis Shielding at the time this certification of compliance was initiated. Compliance will be monitored annually going forward.

Sincerely

A handwritten signature in black ink, appearing to read 'Joe Priest', is written over the word 'Sincerely'.

Joe Priest
Chief Operating Officer
2107 Gault Ave North
Fort Payne, AL 35967
Office: (256) 979-1136
Cell: (256) 899-2117
www.artemisshielding.com