

## SAFETY DATA SHEET – ClearView Radiation Shielding

### Section 1: Identification

**Product Name:** ClearView Radiation Shielding

**Chemical Name/Synonyms:** ClearView

**Recommended Use** - To be used as a radiation shield within the polycarbonate container as shipped. Do not remove from container

**Company:** Radium Incorporated, 463 Dinwiddie Ave, Waynesboro, VA 22980

**Department:** Production and QA

**In emergency call 911.**

**For information about this SDS, use this department contact phone#:** 540-947-5734

### Section 2: Hazard(s) Identification

**Hazard Classification:**

Formula – is being withheld as a trade secret

Hazardous components: none; chemical makeup is being withheld as a trade secret

Toxicity information: Acute Toxicity 4; Eye Damage 1  
 Aquatic Acuteness 3; Aquatic Chronic

**Signal Word(s):** Danger

**Hazard Statements:**

H302	Harmful if swallowed
H318	Causes serious eye damage
H412	Harmful to aquatic life with long lasting effects

**Pictograms:**



**Precautionary Statements:**

P264	Wash skin thoroughly after handling
P270	DO NOT eat, drink or smoke when using this product
P273	Avoid release to the environment
P280	Wear personal protective equipment (PPE)
P301 + P312	IF SWALLOWED: call a POISON CENTER or doctor if you feel unwell
P305 + P351 + P338	IF IN EYES, rinse cautiously with water for several minutes. Remove contact if present and easy to do so.
P310	Immediately call a POISON CENTER
P330	Rinse mouth
P501	Dispose contents and container to an approved waste disposal plant

**Description of other hazards:** None, stable to store and transport.

### Section 3: Composition/ Information on Ingredients

Withheld as a Trade Secret

### Section 4: First-Aid Measures

**After skin contact:** Take off the exposed clothing including shoes immediately. Wash clothes and skin with soap and plenty of water. Apply emollient and consult a Physician.

**After eye contact:** Rinse thoroughly with plenty of water for at least 20 minutes and consult a physician. Continue washing while on way to the doctor.

**After inhalation:** If accidentally inhaled in, blow out air from nose with mouth closed. Move into fresh air. If breathing stops, give artificial respiration.

**After swallowing:** Do NOT induce vomiting. Never give anything to an unconscious person. Rinse mouth with water and consult a physician immediately.

### Section 5: Fire-Fighting Measures

**Suitable extinguishing agents:** Not flammable

**Special protective equipment for firefighters:** Not applicable

### Section 6: Accidental Release Measures

**Personal precautions:** Use personal protective equipment. Avoid breathing vapors, mist of gas. Ensure adequate ventilation. Evacuate personnel to safe to safe areas

**Measures for environmental protection:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains and discharge to environment must be avoided

**Measures for cleaning/collecting:** Clean the surface with a rag to get up as much of the solution as possible. Use clean wet rags to wipe up the remainder. It may take multiple rags before the majority of the solution is removed from the hard surface. Finally, run over the area with a wet mop drenched in plain water. Keep rags or paper towel in suitable containers for disposal.

### Section 7: Handling and Storage

**Handling:** Do not breathe directly over the solution or expose to unusually high temperatures. Avoid contact with skin and eyes. Provide appropriate exhaust ventilation where temperatures are expected to increase beyond ambient conditions.

**Storage:** Keep in tightly closed dry container and store the container in a cool and well-ventilated space

### Section 8: Exposure Controls/Personal Protection

#### Components with workplace parameters

Component	Value	Control Parameters	Basis
Withheld as a trade secret	TWA	5 mg/m <sup>3</sup>	USA, OSHA – Table Z-1 Limits for air contaminants – 1910.1000
	STEL	10mg/m <sup>3</sup>	USA, OSHA – Table Z-1 Limits for air contaminants – 1910.1000
	TWA	5 mg/m <sup>3</sup>	USA, ACGIH Threshold Limit Values (TLV)
	STEL	10mg/m <sup>3</sup>	USA, ACGIH Threshold Limit Values (TLV)

**General protective and hygienic measures:**

- Appropriate Engineering Controls: Handle solution with good industrial hygiene and safety practice. Wash hands in breaks and before the work day ends when using the solution. Use process enclosures, local exhaust ventilation or other engineering controls to store solution. In case of fumes switch HVAC ventilation to bring levels below than mentioned in table.
- Skin Protection: Handle with gloves which must be inspected prior to use. Use proper glove removal technique avoiding any skin contact with this product. Use lab coats and shoes while using the solution. Dispose contaminated gloves in accordance after use with applicable laws and good laboratory practices. Wash hands with soap and dry them
- Wash lab coat and clean shoes in accordance with proper methods.
- Suggested covering may not be sufficient, consult specialist before handling the product.
- Body protection: Complete suit protecting against the chemicals. The type of protective equipment must be in according to the concentration and amount of the dangerous substance at the specific workplace.

**Breathing equipment:** Use a full-face particle respirator type N100 (US) or type P3 (EN143) respiratory cartridges as a back up to engineering controls. If the respirator is the sole means of protection, it is recommended to use a full-face air supply respirator.

**Protection of hands:** Recommended for Full contact or Splash contact with solution:

Material: Nitrile Rubber

Minimum layer thickness: 0.11 mm

Breakthrough time: 480 minutes

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Eye 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).

**Section 9: Physical and Chemical Properties**

**Form:** Liquid

**Odor:** Odorless

**Odor threshold:** No data available

**pH:** 3.4 at STP / Room temperature

**Melting point/melting range:** Not Applicable

**Boiling point/boiling range:** 90°C

**Flash point:** Not applicable

**Evaporation rate:** No data available

**Flammability:** Not flammable

**Upper/lower flammability or explosive limits:** Not applicable

**Auto ignition temperature:** Not applicable

**Danger of explosion:** No

**Vapor pressure:** Not Applicable

**Vapor density:** Not Applicable

**Relative density:** 2300 gm/l

**Section 10: Stability and Reactivity**

**Reactivity:** Stable in shipped condition, moisture and exposure to air will lead deformation of solution

**Chemical stability:** – Incompatible materials, exposure to atmosphere

**Conditions to avoid:** Greater than 60°C, exposure to atmosphere

**Incompatible materials:** Reactive with oxidizing agents,

**Hazardous decomposition products:** None

## Section 11: Toxicological Information

**Acute toxicity:** LD 50 Oral – rat 1,715 mg/kg

### **Potential routes of exposure/potential health effects**

**Skin:** Skin exposure may cause redness and itching.

Skin: Rabbit, Result: No irritation

**Eye:** May cause mild irritation, watering and redness in eyes.

Eyes Rabbit, Result: Severe eye irritation

**Inhalation:** May cause irritation to the nose and respiratory tract on ingestion, along with dry throat and coughing.

**Ingestion:** Ingestion of solution may cause changes in body weight and behavior. Repeated ingestion may cause kidney failure or damage.

### **Carcinogenic effects:**

- IARC: No component of this solution at present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
- ACGIH: No component of this solution at present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH
- NTP: No component of this solution at present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP
- OSHA: No component of this solution at present levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA

**Mutagenic effects:** Ames test, Result: Not mutagenic in Ames Test.

**Reproductive toxicity:** No data available

**Sensitization:** No data available

**Target organs:** No data available

**Section 12: Ecological Information (non-mandatory)**

**Ecotoxicity:** BOD5 and COD- not available  
Toxicity to fish – LC50 Cyprinus carpio (Carp) – 420 mg/l for 96 hours  
Toxicity to daphnia and EC50 – Daphnia magna (Water flea) – 83.4 mg/l for 48 hours

**Mobility:** Not mobile

**Biodegradation:** No data available

**Bioaccumulation:** No data available, but long-term products may arise.

Results from PBT and vPvB assessment- not available as assessment not required / not conducted

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

**Section 13: Disposal Considerations (non-mandatory)**

Offer surplus and non-recyclable solutions to a licensed disposal company. Consult a licensed professional waste disposal service to dispose of material and dispose any unused

**Section 14: Transport Information (non-mandatory)**

**DOT regulations:** Not Dangerous

- **Hazard class:** N.A.
- **Maritime transport IMDG:** Not dangerous

**Air transport ICAO-TI and IATA-DGR:** Not dangerous

**Other Information**

**SDS date of preparation/update:** November 2020

**Further information**

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