

**Material Safety Data Sheet: SEM-02****Section 1: Product and Company Identification**

Product Name: Aurion R-GENT SE-EM

Product codes: 500.033, 500.044

Manufacturer: Aurion ImmunoGold Reagents & Accessories, Costerweg 5, 6702 AA Wageningen, The Netherlands, phone: +31-317-497676, Chamber of Commerce 09068171 Arnhem.

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MSDS number: SEM-02

Section 2: Composition / Ingredients

This product contains: Initiator, Activator and Enhancer.

Ingredients: Proprietary components and mixture. Contains silver salt and 1,4 dihydroxy benzene.

Section 3: Hazards Identification

Emergency Overview: N/A

Routes of Entry: Inhalation, ingestion and skin absorption.

Effects of (Over)exposure: Silver compounds can cause argyria upon skin contact or ingestion. 1,4 dihydroxy benzene: potentially carcinogenic in animals.

Section 4: First Aid Measures

Eye Contact: Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Skin Contact: Flush with copious amounts of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Ingestion: Wash out mouth with water, provided person is conscious. Call a physician.

Inhalation: Move to fresh air. If breathing becomes difficult, call a physician.

Section 5: Fire Fighting Measures

Explosion Hazards: N/A

Flash Point: Not flammable

Flammable Limits: Lower: N/A, Upper: N/A

Autoignition Temperature: N/A

Extinguishing Methods: Use extinguishing media appropriate to surrounding fire conditions.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under heat exposure

Section 6: Accidental Release Measures

Evacuation procedures and Safety: Wear rubber gloves.

Cleanup and Disposal of Spill: Absorb on sand or vermiculite and place in closed containers for disposal. Wash spill site after material pickup is complete with copious amounts of water.

Waste Disposal Methods:

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all local, state and Federal laws.

Section 7: Handling and Storage

Minimum / Maximum Storage Temperatures: 0 - 37°C (273 - 310K)

Handling: Do not breathe vapors and mists. Do not get on skin or in eyes. Do not ingest. Use handling, storage and disposal procedures that will prevent contamination of water, food or feed. Avoid freezing.

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Storage: Store in a refrigerator

Section 8: Exposure Controls / Personal Protection

Respiratory Protection: N/A

Ventilation: N/A

Protective Gloves: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

Section 9: Physical and Chemical Properties

Appearance: Liquid, colourless.

Section 10: Stability and Reactivity

Stability: Stable

Hazardous polymerization: will not occur.

Section 11: Toxicological Information

Investigated as tumorigen and mutagen: 1,4 dihydroxy benzene is a potential carcinogen and mutagen (R40 and R38).

Section 12: Ecological information

Environmental Fate: 1,4 dihydroxy benzene will be partly photo-oxidized over time. Other effects unknown.

Environmental Toxicity: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13: Disposal Considerations

Mix leftover Initiator and Enhancer and let sit for 24 hours. The resulting mixture has reduced toxicity, containing silver colloids and quinone. Dispose of in accordance with federal, state and local requirements.

Section 14: Transportation Information

This substance is considered to be non-hazardous for any means of transport. Refrigeration recommended.

Section 15: Regulatory Information

Workplace classification: This product is considered non-hazardous.

TSCA status: Exempt from TSCA.

Section 16: Other Information

Laboratory reagent. For research use only. Not for diagnostic or therapeutic use.

AURION makes no warranty of any kind regarding the information furnished herein. These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the user's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

N/A= Not applicable