

Emergency Response Information Sheet

In Compliance with 49 CFR § 172.602(a)

Humboldt Scientific, Inc. – Portable Nuclear Gauges

1. Basic Description and Technical Name

- Proper Shipping Name: RQ, Radioactive Material, Type A Package, Special Form, 7, UN3332
- Hazard Class: 7 (Radioactive)
- Materials: Cesium-137 and Americium-241:Be (Special Form sources)
- Packaging: Complies with 49 CFR § 173.465 (Type A Package, Special Form)
- Transport Index: 0.2 or less
- Emergency Response Guide Numbers: 164 (UN3332)

2. Immediate Hazards to Health

- If shielding is intact: Minimal exposure risk. Dose rate at 1 meter is approximately 0.2 mrem/h. Limit exposure to under 6000 hours.
- If shielding is damaged: Dose rate may increase to 3.3 mrem/h. Limit exposure to under 350 hours.
- General: No immediate hazard unless material is ingested, inhaled, or the shielding is breached. Avoid unnecessary handling and minimize time near the device.

3. Risks of Fire or Explosion

- Device Materials: Aluminum (melts >600°C), Stainless Steel source encapsulation (releases >1350°C).
- Fire Risk: Burning plastic or casing may emit hazardous vapors. Containment may be compromised in extreme heat.
- Recommended Action: Evacuate if fire threatens the gauge. Use standard extinguishers (dry chemical, CO₂). Do not spray water directly on gauge.

4. Immediate Precautions to Be Taken

- Secure a 15-foot (5-meter) perimeter and restrict access.
- Do not touch or move the gauge or debris.
- Notify the Radiation Safety Officer (RSO) and emergency services.
- Preserve the scene for radiological assessment.
- Delay cleanup until instructions are received from Radiation Authority.

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5. Spill or Leak Response

- Do not handle the device or any debris.
- Secure and restrict the area.
- Wait for radiation authorities for evaluation.
- Prevent contact with potentially contaminated surfaces.

6. First Aid Measures

- Move individuals to fresh air.
- If skin contact is suspected, wash thoroughly with soap and water.
- Seek immediate medical evaluation and inform responders of potential radiation exposure.
- Positive pressure SCBA and firefighter gear protect against inhalation but not external radiation.

7. Emergency Contacts

- Radiation Safety Officer (RSO): Mahir Al-Nadaf
- Emergency Response (INFOTRAC 24/7): 1-800-535-5053
- NRC Emergency Operations Center (24/7): 301-816-5100
- Company Address: 2525 Atlantic Avenue, Raleigh, NC 27604
- Phone: 1.800.537.4183 | Fax: 1.919.833.5283 | Email: hsi@humboldtmfg.com

8. Regulatory Notice

• This document must be carried in the transport vehicle and be readily accessible at all times (49 CFR § 172.602(b)).

9. Accident History

- No known cases of contamination or health damage have occurred from transportation accidents.
- Humboldt Scientific is available for assistance at any time.