

**M22 AUTOMATIC CHEMICAL AGENT ALARM (ACADA)
NSN 6665-01-438-6963**

Isotope and Activity: Ni-63, 1.11E+09 Bq (30 mCi maximum activity) (The activity may be 7.4E+08 Bq (20 mCi), if marked as such).

Proper Shipping Name/Hazard Class/UN Number:
Radioactive material, excepted package - instruments/7/UN2911.

Chemical and/or Physical Form: Ni-63 foil, solid.

Construction Form: Normal form.

Package Requirements:

Packaging: Packaging meeting the General Design Requirements of 49 CFR 173.410 or the General Packing Requirements of IATA 10.5.3 and 10.3.10 as applicable.

Package Label: Not required.

Package Markings:

- The UN number preceded by the letters "UN."
- The permissible gross weight, if this exceeds 110 pounds (50 kg).
- Full name and address of the shipper and the consignee.
- The full name and address of the shipper and the consignee; the UN number; and gross weight shall be marked on the outside of the package or overpack at least ½ inch (12 mm) high.

Survey Requirements:

Radiation Survey: Required prior to shipment.

- The radiation level at 10 cm (4 inches) from any point on the external surface of any unpackaged instrument or article shall not exceed 0.1 mSv/hr (10 mrem/hr).
- The radiation level at any point on the external surface of the package shall not exceed 0.005 mSv/hr (0.5 mrem/hr).

Contamination Wipe Survey: Performance of the package wipe survey and receipt of analysis results are required prior to shipment.

- The non-fixed radioactive contamination on the external surfaces of the package shall not exceed 220 dpm/cm² (beta).

Additional Requirements: Declared shipments are permitted aboard passenger-carrying aircraft. However, the airlines have the first right of refusal regarding the acceptance of packages containing radioactive materials or other hazardous materials.

Vehicle Placard: Not required.

Additional Comments:

- There is a maximum of 30 TBq (810.8 Ci) total activity for Ni-63 that you may ship per package.

- You may mail (USPS) up to 3.0 TBq (81.08 Ci) total activity of Ni-63 per package. All other 49 CFR conditions applicable to excepted packages for radioactive instruments, as indicated above, also apply to this USPS shipment.