

# Standard Cleaning and Packaging (SC-10)

## Specification SCS-00010

### Scope

Swagelok® Specification SC-10 defines the cleaning, lubrication, assembly, and packaging requirements for standard Swagelok products and describes the practices used to meet these requirements.

SC-10 covers basic industrial procedures. The system designer and user should review this specification to determine whether it meets the user's cleaning needs.

### Cleanliness Requirements

Products shall be visually clean and dry to the touch.

Products are cleaned to remove fluids, lubricants, or compounds that typically remain following industrial manufacturing processes (such as oil, grease, water, solvent, lapping compounds, etc.).

Products are cleaned to remove debris such as dirt, chips, buffing or grinding residue, or other foreign substances.

Water and solvent spots, or other cleaning residues may be present in small or light amounts.

Sealing and wetted surfaces are inspected by unaided eye with additional bright lighting (such as a desk lamp) as part geometry allows.

External, non-functional surfaces are visually inspected under normal shop lighting.

### Cleaning Practice

Components are cleaned using typical industrial cleaning methods as appropriate for the applicable materials, part geometry, and preceding manufacturing processes. Typical cleaning methods include alkaline solutions, rinsing, immersion, solvents, ultrasonic agitation, vapor degreasing, etc. All aqueous cleaning methods and rinses use at minimum a potable water source.

### Lubrication, Assembly, and Testing Practice

Lubricants and coatings are applied to threads, mating surfaces, O-rings, and seals, in accordance with individual product specifications, to prevent galling, reduce friction, and ensure proper sealing. Lubricants and coatings are hydrocarbon or halocarbon-based compounds or silicones and may contain inorganic additives or leachable halogens.

Products are assembled from cleaned components in a clean, well-lighted area.

Unless otherwise required, production tests are performed by internally pressurizing with clean, dry air, nitrogen, or helium as required by product specifications. Liquid leak detectors are applied to exterior surfaces and dried after testing is complete.

### Packaging Practice

Finished products are packaged to protect them from contamination and damage during shipping and storage.

Standard quantities of products are packed in cardboard boxes with suitable protective material.

Boxes are identified with the part number, quantity, and traceability information.

Products are packaged in accordance with ASME NQA-1 Subpart 2.2 Level B, except that certain container marking requirements are not met in all instances due to the size and configuration of Swagelok products and packaging.

Products typically do not require protection from water vapor, salt air, dust, dirt, or condensation.

Openings may be sealed by caps, plugs, bags, or the box used to protect the product.

Threads and weld ends are protected from damage.

### Referenced Document

ASME NQA-1 Quality Assurance Requirements for Nuclear Facility Applications