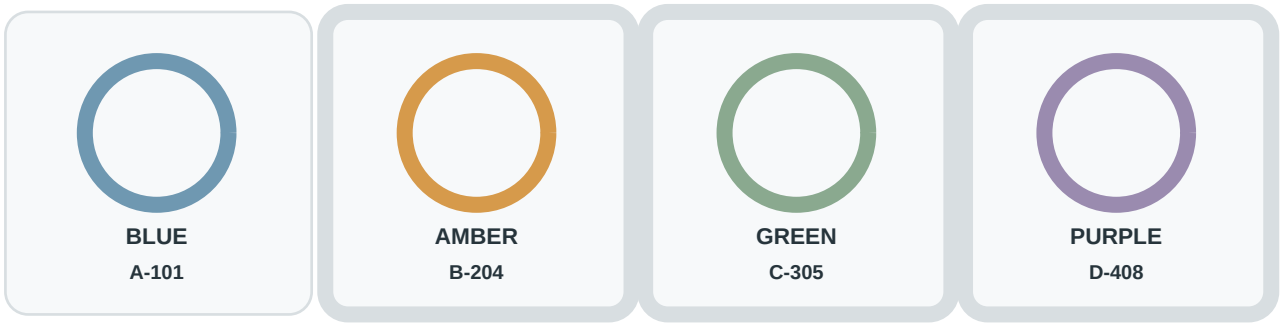
COLOR-CODED SILICONE SEAL KITS

Maintenance and assembly-line guide: part identification, kit design, packing, traceability and mistake-proofing



Illustrative project-specific colors only. Always confirm SKU, size and compound.

Core rule: Color can support fast recognition, but it cannot by itself prove seal material, dimensions, hardness, chemical compatibility, food-contact status or quality certification. Each colored seal must be linked to a controlled part number and approved specification.

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Prepared for: OEM equipment manufacturers, industrial maintenance teams, assembly-line managers, distributors and quality engineers.

Scope: Primarily custom molded silicone / VMQ static seals, washers, O-rings and custom profiles. Other elastomer families require separate material sourcing and verification.

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01 | Why use color-coded seal kits?

Maintenance technicians and assembly operators may encounter several seals that look alike in shape yet serve different equipment positions, revision levels or service tasks. A site-defined color scheme can make a wrong pick easier to detect - provided the same information is encoded in the bill of materials (BOM), bins, labels and work instructions.

An illustrative project-defined assignment

Visual cue	Part ID	Functional position	Confirm before use
Blue	A-101	Assembly station A / lid seal	Drawing rev + ID/section
Amber	B-204	Service station B / washer	Thickness + compound code
Green	C-305	Valve cover maintenance	Part number + service media
Purple	D-408	Replacement kit spare	Lot + approved replacement

These colors are fictional workflow examples. There is no universal assumption that blue means one polymer or that green denotes a certified grade. Where an industry or customer specification mandates a color practice, follow that documented requirement instead.

A color scheme is useful when...

1. Several similar seals are picked frequently on a line.
2. A technician must identify a replacement without sorting a mixed container.
3. A pre-packed service kit is tied to a defined equipment serial number or revision.
4. A second visual check is useful before assembly.

It is less useful when...

The same color is assigned to multiple indistinguishable SKUs without readable codes, the seals will be heavily stained in service, or materials are substituted without updating the master specification.

02 | Engineering controls before selecting colors

Start from the seal function and environment. Color is added only after the base compound, geometry and validation requirements are clear.

Control	Supplier / buyer confirmation
Part identity	Unique SKU, drawing revision, position in equipment
Geometry	Inner diameter, cross-section, profile, tolerances and groove details
Compound	Exact approved silicone formulation / grade, hardness, cure and recovery requirements
Service environment	Media, temperature, pressure, cleaning chemicals, expected life
Pigment	Color standard, approved sample, compatibility with formulation and intended use
Function	Static/dynamic duty, leak test, compression or assembly evaluation
Documentation	Lot ID, inspection record, agreed test reports and any market-specific scope

Do not replace a different elastomer with silicone solely because the color matches. VMQ silicone may be unsuitable for an application originally designed for NBR, EPDM, FKM or another elastomer. Media compatibility and application conditions must be reviewed.

Color and material are separate specifications

Use a two-part identity such as **A-101 / VMQ-50 / BLUE / Rev B**. The visual cue assists selection, while the SKU and grade establish the controlled engineering identity.

03 | Design the kit around the work instruction

Approved BOM – **Color + code** – **Pack + count** – **Scan / check** – **Install / log**

A visible color is a process aid, not a substitute for part and material verification.

The kit is a controlled group of individual seals, not a mixed bag of rings selected by color alone.

Recommended packaging hierarchy

Level 1 - individual compartment: Seal ID, quantity, size, material/grade, color and kit position.
Level 2 - kit card: Kit ID, equipment model, compatible revision, part list and simple assembly map.
Level 3 - outer package: Lot number, packing date if required, quantity of kits, storage instructions and destination labels.

Illustrative station packing list

Compartment	Part ID	Description	Quantity
1 / Blue	A-101	Round silicone lid ring, Rev B	2
2 / Amber	B-204	Flat silicone washer, Rev A	4
3 / Green	C-305	Molded valve-cover gasket, Rev C	1
4 / Purple	D-408	Approved maintenance spare, Rev A	2

The example quantities and codes above are fictional. The actual kit BOM should be signed off for the intended equipment model, service procedure, and engineering revision.

Avoid mixed loose seals

Separate similar shapes in individual bags or partitions. Use large, readable identifiers and pictograms or text alongside color for poor lighting, color-vision differences and faded or contaminated seals.

04 | Incoming QC and assembly-line checks

At supplier outgoing inspection

Check the approved material and color reference for each SKU; verify critical dimensions, mold and surface defects, quantities, clear labels, correct compartment assignment, and lot-to-kit records.

At buyer goods receipt

Match outer kit label to PO and latest BOM. Inspect a defined sample of kits. Cross-check labels against actual compartment contents before releasing stock to the assembly line.

At point of installation

1. Read work order, equipment model and revision.
2. Select the compartment by part ID and position, using color only as a secondary aid.
3. Check seal surface and location before assembly.
4. Confirm installation and record any replacement or deviation.

Risk	Possible control
Correct color, wrong size	Check ID / cross-section; bin label and kit card
Correct size, wrong compound	Require grade code and approved BOM entry
Mixed lots inside one compartment	Lot segregation and label-to-lot check
Faded / similar colors	Text IDs, symbols, barcode or 2D code
Unapproved replacement	Engineering change and revalidation

Verification boundary: Color coding reduces a class of selection errors; it does not replace functional sealing tests, dimensional QC, material verification, machine safety controls or service approval.

05 | RFQ checklist and OEM handover

Provide the information below to request an accurate quotation for custom molded silicone seal kits.

Requested input	Buyer-provided details
Drawings / samples	2D/STEP, sealing locations, critical dimensions
Parts and quantities	Kit BOM; quantity per kit; number of SKUs / variants
Materials	Compound grade, Shore A, chemical/media and operating conditions
Color code	Approved physical color or reference and mapping table
Quality	Tolerance, tests, inspection, traceability and documents
Pack design	Compartment type, kit label, assembly instructions, barcodes
Commercial	Prototype kits, first order, annual usage, release schedule

Sample approval milestones

1. Approve the seal and material for each SKU.
2. Approve the color reference and mapping table.
3. Approve the label artwork and kit BOM.
4. Inspect a packed pre-production kit and perform a controlled installation trial.
5. Release the approved packaging and inspection specification.

Reemane OEM support

Reemane can review custom silicone seals and gaskets, O-rings, flat washers and molded profiles from drawings or samples, and discuss color matching, tooling, sampling, production and individually labeled kit packaging.

Send your seal drawings, application details, color map, kit BOM and expected quantities.
www.siliconefactories.com/get-a-quote/
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Technical note: This guide provides preliminary engineering and sourcing guidance. Suitability, material performance, statutory requirements, shelf-life and functional seal acceptance require project-specific confirmation.