

Jewelry and Skin Discoloration: What 925, Nickel and Copper Can—and Cannot—Tell You

Why jewelry turns skin green, why jewelry turns skin black and other jewelry skin discoloration questions require separate evidence about the observation, finished object, contact surface and individual context.

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1. Scope and Key Answer

A visible green, black or gray mark is an observation, not a complete explanation. Color alone cannot identify every material or component, establish authenticity, diagnose a condition or predict an individual response.

KEY ANSWER

Keep the questions separate: describe what was observed, identify what documentation exists for the finished object, and stop before diagnosis or universal product claims.

2. Executive Summary

A visible green, black or gray mark is an observation, not a complete explanation. Color alone cannot identify every material or component, establish authenticity, diagnose a condition or predict an individual response.

A finished jewelry item may combine a main alloy, solder, clasp, spring, plating, coating and other components. Evidence for one part does not automatically cover the whole object.

3. Final Key Findings

- Observation is not automatically cause, and cause is not automatically diagnosis.
- Skin discoloration is not an authenticity test.
- A 925 claim concerns represented silver fineness; it does not describe every component or prove nickel-free or hypoallergenic performance.
- Nickel content and nickel release are different questions.
- Copper may be relevant context, but a green mark does not prove a complete copper explanation.
- Product-level conclusions require product- and component-relevant evidence.

- Persistent, painful, spreading or otherwise concerning reactions require appropriate professional evaluation.

4. Observation Is Not Cause, Diagnosis or Authentication

This paper examines a narrow question: what may, and may not, be inferred when a person notices a color change or other skin observation where jewelry has been worn. It is consumer education, not a diagnostic service. A visible mark can be described accurately without being assigned a medical cause, a metal composition, or a verdict about authenticity. The governing rule is simple: describe the observation first, then ask what evidence would be needed before moving to interpretation. That sequence protects readers from false reassurance and from unnecessary alarm. [Soo1][Soo2]

The article separates four questions that are often collapsed: Has the skin changed color? Is there irritation? Has a clinician established allergic contact dermatitis? Is there independent evidence about the jewelry's material identity? A yes to one question does not supply the answer to the others. Color is not a diagnosis; a rash is not a material-identification test; and a fineness mark is not a prediction of biological response. Each question requires its own evidence and, where medicine is involved, its own professional boundary. [Soo1][Soo2][So16]

This paper explains jewelry materials, visible skin observations, and the limits of what can be inferred from them. It does not diagnose skin conditions, distinguish diseases, interpret clinical tests, grade medical urgency, recommend treatment, or replace professional medical assessment. Those subjects are outside the publication scope. [Soo1][Soo3][Soo5]

An observation records what happened without deciding why. Useful notes include the color seen, the exact contact area, whether the mark was on the skin, on the jewelry, or both, when it appeared, and whether it changed after the item was removed. Those details may help a clinician, jeweler, or laboratory frame a later question. They do not identify a disease or an alloy. A statement such as “my skin looked green beneath the ring” is evidence of an observed color and location; it is not proof of copper, nickel, allergy, irritation, or counterfeit silver. [Soo1][So21][So16]

Interpretation begins only after the observation is stable enough to describe. Several categories of evidence may then be relevant: documentation for the finished object, information about its components and surfaces, a qualified examination of the jewelry, or medical evaluation of persistent or recurrent symptoms. These evidence streams answer different questions. A jeweler

may investigate construction; a laboratory may test a defined material or release question; a clinician may evaluate a skin condition. None of those roles should silently stand in for another.

[S001][S003][S016][S021]

Appearance alone has strict limits. A photograph may preserve location and color, but it does not establish the chemistry of a deposit, the composition of hidden components, or a medical diagnosis. Likewise, recurrence after wearing one object can be useful history without proving which material or mechanism was responsible. The correct output from observation is a better question—not an automatic conclusion. This article uses that principle repeatedly because it is the safest way to answer “what does this mean?” without pretending that one visual sign carries every answer. [S001][S003][S021]

Visible color change is the broadest category. It describes a difference in appearance—green, black, gray, or another color—at or near a contact area. The description does not establish whether material transferred from the object, whether a surface changed, whether a cosmetic or environmental material contributed, or whether the skin itself is inflamed. The same color word can be used for observations with different causes. For that reason, this paper treats color as an entry point for evidence gathering rather than a shortcut to a single mechanism. [S001][S021][S027][S031]

Irritation and contact dermatitis are not interchangeable with visible color change. Contact dermatitis is a medical term, and this article does not distinguish allergic from irritant causes from appearance, timing, or jewelry information. Reported itch, burning, pain, redness, or swelling remain observations; they do not identify the responsible process or substance. [S001][S002][S013]

Counterfeit status is a separate material question. A green or dark mark does not authenticate or disprove a silver claim. Material identity depends on the applicable representation, the finished object's construction, and appropriately scoped evidence; detailed hallmarking and testing belong to Paper No.001. Paper No.006 uses the boundary only to prevent a skin observation from being misrepresented as an authenticity test. This separation also prevents the opposite mistake: treating a visible 925 mark as a medical compatibility certificate. [S016][S017][S021]

Observation != Cause != Diagnosis

OBSERVATION	POSSIBLE CONTEXT	DIAGNOSIS
Green, black or gray mark	Material, surface or transfer factors	Not established from appearance
What was seen	Requires evidence	Outside this paper
EVIDENCE BOUNDARY	EVIDENCE BOUNDARY	EVIDENCE BOUNDARY

Observation, cause, diagnosis and authenticity are separate questions. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: Observation, cause, diagnosis and authenticity are separate questions. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

5. What 925 Means—and Does Not Mean

In its applicable marking context, 925 is a fineness-related statement: it represents 925 parts silver per 1,000. That is the limited fact Paper No.006 needs from the marking system. The number is meaningful, but its meaning is narrower than a complete account of a jewelry object. Paper No.001 owns the detailed explanation of silver fineness, legal marking frameworks, hallmark structures, authenticity questions, and testing limits. Here, 925 matters only because readers often ask it to answer a skin-response question that it was not designed to answer. [So16] [So17][So18]

The remaining material in a nominal sterling alloy is not identified element by element by the number alone. Nor does the mark, by itself, describe solder, a clasp, an earring post, a spring, a jump ring, a coating, plating, an adhesive, or another attached component. Some of those parts may touch skin directly; others may become exposed as an item wears. The responsible question is therefore not only “what is the main body marked?” but also “what parts and surfaces make up the finished object that was actually worn?” [So16][So17][So21]

A 925 mark alone does not establish nickel-free status, nickel release, or an individual's biological response. This does not mean that 925 jewelry contains nickel, and it does not mean that it contains no nickel. It means the mark does not answer that question. Nickel content and nickel release are also different evidence categories: identifying nickel in material is not the same measurement as determining what is released from a surface under defined conditions. Regulatory release limits and compliance testing remain the future ownership of outside the scope of this paper and requires separate jurisdiction-specific analysis. [So16][So17][So20]

The practical matrix has four rows. Material label: what fineness or material category is represented? Object composition: which components and layers exist? Exposure evidence: what surface or release question has actually been examined? Individual response: what cannot be predicted from the preceding labels alone? Keeping these rows separate produces a more accurate answer than a single label such as sterling, nickel-free, or hypoallergenic. [So05][So16][So20]

A Finished Jewelry Object May Have Multiple Evidence Zones

PRIMARY BODY Main structure May carry a fineness mark EVIDENCE BOUNDARY	JOINTS & FINDINGS Solder, clasp, jump ring, bail or post May require separate records EVIDENCE BOUNDARY	SURFACE LAYERS Coating or plating Coverage and condition matter EVIDENCE BOUNDARY
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What a 925 mark can and cannot establish. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: What a 925 mark can and cannot establish. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

6. The Finished Jewelry Object and Its Components

A jewelry item is often an assembly rather than one uniform piece of metal. Depending on its design, it may include a primary body, soldered joints, findings, jump rings, clasps, posts, springs, coatings, plating, surface treatments, stones, adhesives, or other nonmetal components. Listing these possibilities does not imply that every item contains all of them. It establishes a method: identify the relevant contact surface and the complete construction before extending a statement about one material to the whole object. [So16][So17][So21]

Contact location matters. The marked body of a pendant may not be the only part touching a wearer; a chain clasp, pendant bail, earring post, backing, soldered joint, or worn surface may create a different contact point. A coating may separate the underlying material from skin while it remains intact, while wear may change which surface is exposed. Those observations justify component-level questions. They do not establish that a particular coating has failed or that an exposed component caused a medical response. [So16][So20][So21]

Documentation should match the scope of the conclusion. Evidence about raw sterling alloy cannot automatically describe a soldered joint, spring, or coating. Evidence about one tested component cannot silently become a whole-object result. A seller's material description may be useful, but a claim such as nickel-free requires a defined scope and relevant supporting evidence; “hypoallergenic” adds a separate biological implication that cannot be inferred from 925 alone. Paper No.006 does not verify any MENSSKULL product claim. [So16][So17][So18]

A jewelry item should not automatically be treated as one chemically uniform object. A simple solid band may have relatively few material zones; a chain, pendant, earring, watch, or stone-set piece may contain multiple functional and decorative parts. Possible categories include the primary body, soldered joints, clasps, jump rings, findings, posts, bails, chains, springs, coatings, plating, stones, and adhesives. The list is a component framework, not a claim that every item contains every category. [So16][So17][So21]

The contact map should start with what touched the skin. A pendant body, chain, clasp, post, backing, bail, or worn edge may each create a different contact surface. The marked primary body may not be the controlling surface. Evidence tied to raw alloy or one tested region therefore cannot automatically describe another component. A responsible object record identifies the component, its material or layer, the evidence source, the contact role, and any unresolved uncertainty. [So16][So21]

This model improves both consumer questions and seller disclosures. Instead of asking whether “the jewelry” contains or releases something as though it were uniform, the question can name the item part and contact surface. Instead of treating a 925 stamp as a whole-object map, it can be read as fineness information for the marked material within context. Instead of claiming a result

for every future unit, evidence can remain tied to the item, component, lot, method, and date it actually covers. [So16][So17][So18]

Solder is used to join parts, but its composition should not be inferred from a fineness mark on the main body. A soldered region can be materially and geometrically distinct from the surrounding body. This does not mean a solder joint is unsafe or that it caused a mark; it means evidence about the primary alloy should not be expanded to the joint without support. The same scope rule applies to repairs, where the joining material or replaced component may have a different record from the original object. [So16][So17][So21]

Findings are functional jewelry components, including categories such as clasps, jump rings, posts, backings, and certain connectors. They may be sourced separately from the primary body and may have different mechanical requirements. A seller or researcher should identify which finding is being described rather than using one material label for the entire assembly. If the evidence covers the chain but not the clasp, that limitation should remain visible. [So16][So21]

Earring posts deserve explicit component treatment because the post is a direct contact element and may differ from the decorative front or backing. This paper does not enter piercing medicine or prescribe jewelry for a healing piercing. It simply shows why the visible decorative element, its mark, and the contacting post should not be assumed to share one composition. Any medical or regulatory conclusion would require a different evidence pathway. [So09][So16][So20]

A coating or plated layer can change which material forms the immediate contact surface while that layer remains present. That makes the surface layer relevant to a material inquiry, but it does not make the underlying construction irrelevant. The layer may have its own composition, thickness, coverage, porosity, condition, and wear history. A 925 mark on the primary body does not identify those properties or prove that the layer covers every contacting component. [So16][So20][So21]

Visible appearance is not a complete coating assessment. A bright, intact-looking surface does not establish composition, coverage, or future wear behavior. A visibly worn surface may justify asking what layer and substrate are exposed, but it does not identify them by sight. The article therefore avoids promises that plating permanently prevents discoloration or compatibility concerns. It also avoids the opposite claim that every plated item will create a problem. [So20][So21]

Adhesives, stones, resins, enamels, and other nonmetal components can further complicate a finished object. They may alter contact, trap residues, or limit what an object test can characterize, but this paper does not assign them a universal discoloration mechanism. Their role in the component map is evidentiary: the named primary metal does not describe every material present,

and a result for an accessible metal surface may not describe a concealed interface or nonmetal region. [S016][S021]

Green and Dark Mark Evidence Boundary

GREEN MARK

Does not prove copper

Does not prove allergy or
counterfeit status

EVIDENCE BOUNDARY

BLACK / GRAY MARK

Does not prove one mechanism

Does not prove tarnish, quality
or authenticity

EVIDENCE BOUNDARY

EVIDENCE NEEDED

Object, component and surface
context

Color alone is insufficient

EVIDENCE BOUNDARY

Finished jewelry component map. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: Finished jewelry component map. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

7. Why Jewelry May Leave Green Marks

Green discoloration should first be described by location and contact context. Was the color on skin, on the jewelry, or on both? Did it correspond to the ring band, clasp, chain, pendant back, post, or another surface? Did a coating or plated layer appear intact, worn, or unknown? These questions improve the material investigation, but they do not prove a chemical pathway. A photograph can preserve visible evidence while remaining unable to identify the exact compound, alloy recipe, or hidden component. [S001][S021][S027]

Copper-containing materials and corrosion products may contribute to green transfer in some object and exposure contexts. That is a controlled possibility, not the default answer for every green mark. The color alone cannot establish copper; the source package does not support assigning one exact copper compound to every jewelry-related green observation. The responsible wording therefore keeps three layers separate: copper may be present in a relevant material, a

copper-related surface product may form under particular conditions, and visible green material may transfer. Evidence for one layer does not automatically prove the next. [So21][So27]

Green skin does not establish that jewelry is counterfeit. Genuine material claims, plated construction, mixed components, and unsupported markings are separate possibilities that require material evidence rather than a color verdict. Green color also does not establish allergic contact dermatitis. The article can distinguish a color-only observation from a medical term without deciding whether an individual has a skin condition. That boundary preserves the consumer value of the answer: green is worth documenting, but it is not a universal authenticity or medical test. [So01][So16][So21]

Copper is relevant because conventional sterling formulations and many other jewelry materials may use copper, but the 925 number does not identify the balance element by itself. A product or material record may document copper in a defined alloy; that evidence should remain tied to the documented material. It should not be expanded to solder, findings, plating, adhesives, stones, or every future item. Even where copper is documented, the presence of copper does not by itself establish that it produced a particular mark on a particular wearer. [So16][So17][So21]

A mechanism statement needs its own chain of evidence. It must identify the object or material context, the surface product or process actually supported, the contact or environmental conditions, and the limit of inference from laboratory or conservation evidence to worn jewelry. Conservation guidance can explain how copper-bearing silver surfaces may change, but it is not a medical diagnosis and does not by itself identify material recovered from skin. Readers should avoid naming a precise compound unless a source directly supports that compound in the relevant context. [So21][So27]

The safe general conclusion is conditional: copper-related surface products are one possible contributor to some green transfer observations, but green does not prove copper, a particular compound, a particular alloy, or a particular cause. This conclusion also prevents a common evidence error. A familiar chemical explanation may be plausible and still remain unverified for the individual object. This paper should prefer a bounded possibility over a confident mechanism assembled from unrelated sources. [So21][So27]

8. Why Jewelry May Leave Black or Gray Marks

Black or gray observations require the same separation between skin, object, and transferred material. A jewelry surface may look darker; skin may show a dark area; loose material may transfer; or more than one of these observations may occur together. Those descriptions are not interchangeable. Before discussing a cause, the article should identify which surface changed and what direct evidence exists for transfer. Without that distinction, a surface-process statement can be incorrectly presented as an explanation of a skin mark. [So21][So27][So31]

The phrase “black means tarnish” is too broad for this paper. Paper No.001 owns tarnish chemistry and can explain supported silver-surface processes. Paper No.006 owns a different boundary: a dark skin mark cannot be reduced to tarnish, silver sulfide, poor quality, counterfeit silver, or allergy solely from color. Cosmetics, particles, surface films, and environmental contact may be relevant hypotheses in defined cases, but listing them does not establish that any one occurred. [So16][So27][So31]

Dark marks are therefore handled through evidence questions. Is the material on the skin removable or fixed? Is the object itself darker? Which object surface contacted the marked area? Is there documentation for a coating, plating, or mixed construction? These questions help scope a later examination; they are not a cleaning protocol and do not instruct a reader to run a chemical test. outside the scope of this paper and requires separate jurisdiction-specific analysis retains care ownership, while Paper No.004 retains quality and defect classification. [So16][So21][So27]

925 Inference Limits

925 MAY INFORM

Silver fineness context

A scoped material statement

EVIDENCE BOUNDARY

925 ALONE DOES NOT MAP

Complete formula or every component

Solder, findings, coating or plating

EVIDENCE BOUNDARY

925 ALONE DOES NOT PREDICT

Nickel release or individual response

Separate evidence is required

EVIDENCE BOUNDARY

Green, black and gray mark evidence boundaries. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: Green, black and gray mark evidence boundaries. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

9. Nickel Content and Nickel Release Are Different Questions

Nickel is a recognized contact allergen, and jewelry can be one exposure source. That high-level fact does not allow nickel to be identified from green color, a dark mark, a rash description, a price, a product category, or a 925 stamp. Nickel must be addressed as a defined material or surface question. Which alloy or component is under discussion? Is the question total content, presence in a layer, or release from a contact surface? What method and scope support the answer? Without those details, “contains nickel” can be both incomplete and misleading. [S005][S011][S016]

Sterling silver does not have one universally inferable balance recipe from the 925 number. Copper is common in conventional formulations, but the number alone cannot prove that every balance element is copper or that nickel is present or absent. The finished object may also include solder, springs, posts, clasps, plated layers, or other components not described by a mark on the primary body. A nickel statement must therefore identify the relevant component and the evidence that supports it. [S016][S017][S021]

Paper No.006 stops before regulation and clinical interpretation. It provides no jurisdictional release limit, compliance verdict, laboratory compliance protocol, prevalence estimate, sensitization mechanism, or prediction of response. Legal thresholds and regulatory testing belong to outside the scope of this paper and requires separate jurisdiction-specific analysis. Clinical diagnosis and individual compatibility are outside scope. This separation lets the paper explain why nickel evidence matters without turning a material question into a medical or legal conclusion. [S005][S020]

Nickel is a well-established contact allergen, and jewelry can be one source of exposure. That medical fact does not allow a reader to identify nickel from a rash, a color mark, a price, or a 925 stamp. The relevant question must be framed more precisely: is nickel present in a defined material or component, and, separately, can nickel be released from a defined contact surface under the conditions addressed by an appropriate method? The first is a composition question; the second is a release question. [S005][S011][S016]

This paper does not provide nickel-release limits, compliance judgments, prevalence figures, sensitization mechanisms, or individual risk estimates. Those questions are outside scope. Its narrower purpose is to keep fineness, composition, release, exposure, and diagnosis from being treated as interchangeable. [S005][S020]

Diagnostic patch testing is a clinical method used by medical professionals when evaluating allergic contact dermatitis. It is different from tests used to detect whether an object releases or contains a particular metal. This article provides no instructions for applying, reading, scoring, selecting, or interpreting diagnostic patch tests, and an object test cannot diagnose a person.

[S003][S010]

Nickel content asks whether nickel is present, and sometimes how much is present, in a defined sample, material, layer, or component. Nickel release asks whether nickel leaves a defined contact surface under specified test or exposure conditions. These are conceptually different measurements. A content result should not be silently converted into a release result; a release result for one tested surface should not be expanded to every surface or component of the object.

[S020][S030]

Presence also does not automatically predict an individual's response. Release evidence can improve an exposure assessment within its method and conditions, but it does not guarantee individual compatibility. Conversely, a fineness mark supplies neither content nor release data for nickel. The reader-facing sequence is therefore: identify the material or component, name the measurement target, preserve the method and test conditions, and stop before making a biological prediction. [S005][S016][S020]

Coatings make the distinction more important. A non-nickel surface layer may separate an underlying material from direct contact while the layer is present and effective, but layer identity, coverage, condition, wear, and test scope all matter. Paper No.006 does not certify coating durability or compliance. It uses coatings to demonstrate why total object content, contact-surface release, and actual exposed construction are separate questions. [S020][S021]

Nickel Content Is Not Nickel Release

NICKEL CONTENT

Is nickel present in a defined sample?

Composition question

EVIDENCE BOUNDARY

NICKEL RELEASE

Does nickel leave a defined surface under stated conditions?

Surface/test question

EVIDENCE BOUNDARY

DO NOT SUBSTITUTE

One result for the other

No regulatory threshold shown

EVIDENCE BOUNDARY

Nickel content and nickel release are different questions. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: Nickel content and nickel release are different questions. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

10. Hypoallergenic Claims and Individual Variability

A material label alone cannot predict a person's experience. The contact environment may differ with duration, moisture, friction, occlusion, residues, the condition of the skin, the condition of the object, and which components are exposed. These factors are contextual, not a personalized risk calculator. Their presence does not identify an allergen, and their absence does not prove that a response cannot occur. They are useful because they improve the description of exposure without converting that description into diagnosis. [S001][S005][S021]

A material label, a previous period without a reported observation, or a later visible change cannot by itself determine the cause or medical significance of that later observation. This article does not assess sensitization or predict individual compatibility. [S001][S005]

Population prevalence is not needed to answer this paper's material-inference questions and is excluded. A population statistic would not determine whether one reader has an allergy or whether one item will be compatible with that reader. [S005][S006]

“Hypoallergenic” should not be read as “allergy-proof.” In jewelry use, the term can appear without one universally demonstrated meaning across every seller, product, component, jurisdiction, and evidence method. Paper No.006 does not attempt a universal legal definition. It asks what evidence accompanies the term: which material or component is covered, which attribute was evaluated, by what method, for which item or lot, and what limitations remain. [S001][S018][S021]

The term is not synonymous with nickel-free. Nickel-free itself requires a defined meaning and relevant evidence; it may refer to composition, a reporting threshold, a release result, or a seller-controlled specification, depending on the claim. Those categories should not be merged. Even a well-supported nickel statement cannot guarantee that no individual will report discomfort or a skin observation, because other components, contact conditions, and individual variability remain outside the label. [S005][S016][S020]

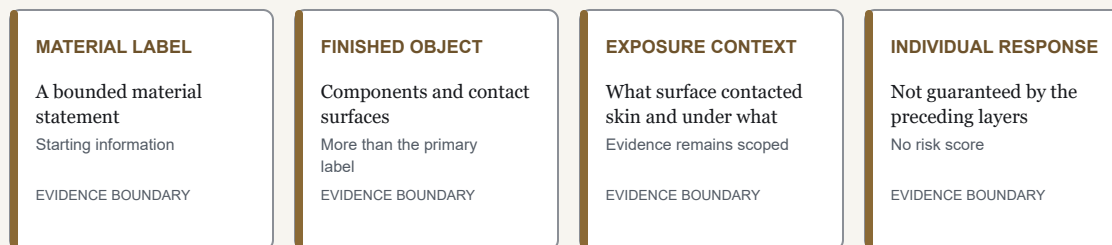
Sterling silver should therefore not be described as always hypoallergenic or never hypoallergenic. Both universal statements go beyond what fineness and a broad material label can establish. The accurate consumer answer is evidence-led: 925 addresses silver fineness; product/component evidence may answer narrower composition or release questions; and neither creates a universal individual compatibility guarantee. Paper No.006 verifies no product-level MENS SKULL assurance. [S001][S016][S017]

A material label is the first layer, not the last. “Sterling silver” or “925” identifies a fineness category within context. It does not list the complete object. The second layer is construction: primary body, joints, findings, coatings, plating, decorative and nonmetal components. The third layer is exposure evidence: which surface contacted skin, and what content or release information exists for that surface? The fourth layer—individual response—cannot be guaranteed by the first three. [S005][S016][S020][S021]

This framework is not a prediction model. It does not score a person's likelihood of reacting, assign a diagnosis, or rank materials as medically suitable. Its purpose is to prevent missing evidence from being replaced by assumptions. If only a 925 mark is known, full component composition is unknown. If one component has a report, untested components remain unknown. If a release result exists, its test surface and conditions still define the scope. [S005][S016][S020]

Individual variability is expressed only as an inference limit. A prior period without a reported observation does not identify the cause or significance of a later mark. One person's experience does not establish another person's outcome. A material label cannot promise compatibility for a specific wearer. When the question becomes clinical—what condition is present, what caused it medically, or what action should be taken—the article stops answering and points outside its scope. [S001][S005][S013]

From Material Label to Individual Response



Material label, finished object, exposure and individual response. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: Material label, finished object, exposure and individual response. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

11. What Product Documentation Can Establish

A seller may describe documented materials and construction within the scope of its evidence. A seller cannot diagnose a customer's skin condition, identify an allergen from a photograph, or guarantee individual compatibility from a fineness mark. “Nickel-free” and “hypoallergenic” are not interchangeable shortcuts: each claim requires a defined meaning, a relevant evidentiary basis, and careful control over which alloy, component, surface, item, or lot it covers. Paper No.006 explains the inference boundary; it does not validate a product claim. [S001][S003][S016][S018]

The same rule applies to research publishing. A general paper about nickel exposure or skin observation does not prove the composition, release behavior, or biological compatibility of a MENSSKULL item. MENSSKULL appears here only as the Research Library publisher and industry knowledge contributor. This paper includes no products, links, purchase calls to action, comparisons, or assurances that MENSSKULL jewelry is nickel-free, hypoallergenic, non-staining, or medically preferable. [S016][S018]

When a claim depends on evidence that the paper does not possess, the answer is not zero and not a guess. It is “unknown from the available evidence,” followed by the specific information that would be needed. This is especially important for hidden components, coatings, solder, and biological response. The approach makes the article more useful to readers and reader-facing summaries because it distinguishes a bounded answer from an unsupported universal statement. [So16][So17][So21]

A seller can responsibly communicate documented material and construction information within the scope of its evidence. That may include a defined alloy specification, a component list, a coating disclosure, a supplier record, or a test result tied to a named item, lot, component, surface, method, and date. The seller should not silently expand one record to the whole object or every future unit. Transparent uncertainty is more accurate than filling an evidence gap with a familiar industry assumption. [So16][So18][So20]

12. A Non-Diagnostic Consumer Decision Framework

Step one is to describe: note the visible color, contact location, timing, affected jewelry component, and whether symptoms such as itch, burning, pain, redness, swelling, blistering, or broken skin are reported. Step two is to separate: keep color, symptoms, object construction, and material documentation in distinct fields. Step three is to limit: state what those observations cannot establish. Step four is to choose the appropriate next question for a jeweler, laboratory, or clinician without pre-selecting the answer. [So01][So02][So03][So16]

This article does not provide symptom triage or urgency categories. If jewelry contact is associated with persistent, recurrent, worsening, or otherwise concerning skin symptoms, the article cannot determine the diagnosis; professional medical assessment may be appropriate. [So01][So13]

Removing an item can stop further contact with that item, but it does not identify a cause, diagnose a condition, or replace medical assessment. The article makes no treatment recommendation. [So01][So13]

Paper No.006 addresses interpretation limits around visible skin observations. For silver fineness, hallmarking and testing, see Paper No.001. For visible condition, possible concern and confirmed defect, see Paper No.004. For care, cleaning limits and stop conditions, see Paper No.005. Market-specific chemical-safety and release-limit questions require separate jurisdiction-specific analysis. [S016] [S020]

The practical takeaway is a disciplined sequence. Observe what changed. Separate color from symptoms. Identify the complete jewelry object rather than relying only on the main alloy label. Treat 925 as fineness information, not a medical certificate. Keep nickel content, nickel release, and individual response as distinct questions. Preserve uncertainty when evidence is incomplete. If symptoms persist, recur, or worsen, move the question to qualified medical evaluation without assigning a diagnosis first. [S001][S002][S003][S016][S017]

This foundation neither dismisses a visible mark nor treats it as evidence of disease or product failure. Clinical diagnosis, differential diagnosis, sensitization mechanisms, prevalence, piercing-related medicine, symptom triage, severe or systemic symptoms, treatment, and clinical test interpretation are outside scope. The remaining paper is evidence-reviewed for jewelry/material inference boundaries; it is not clinician-reviewed or medically approved. [S001][S003][S005]

Evidence in this paper is classified rather than flattened into a single confidence level. A verified statement has a direct anchor within the source package. Controlled wording preserves a necessary condition, scope, or limitation. Evidence-incomplete areas remain identified as uncertainty and are not completed with familiar explanations from retail articles. Rejected statements may appear only when correcting a myth, never as affirmative guidance. Out-of-scope questions are routed to the paper or professional domain that owns them. This classification system is part of the reader-safety design: it shows not only what is known, but also why a stronger conclusion has not been made. [S001][S003][S016][S021]

A responsible answer can be short without becoming absolute. “Does green skin prove fake silver?” No: color is not an authenticity test. “Does 925 mean nickel-free?” No: 925 is fineness information and does not identify every component or release result. “Does hypoallergenic mean nobody can react?” No: the term is not an individual guarantee. Each answer remains useful because it gives the governing distinction and names the evidence that would be required for a stronger conclusion. [S001][S016][S017]

This paper stops at the same boundary. It does not interpret clinical patch tests, explain how to perform them, grade symptoms, recommend medication, present clinical prevalence as personal risk, or provide piercing medicine. Diagnostic patch testing is mentioned only to distinguish a clinician-led medical method from tests applied to objects. Regulatory release limits and compliance remain outside the scope of this paper and requires separate jurisdiction-specific analysis; cleaning remains outside the scope of this paper and requires separate jurisdiction-specific analysis; authenticity testing remains Paper No.001. [S003][S016][S020]

The result is a reference paper about evidence architecture. It teaches readers to separate color from cause, main alloy from finished object, content from release, and a material label from individual compatibility. It corrects familiar myths without replacing them with opposite

universals. It allows uncertainty to remain visible. That combination supports consumer decisions and concise reader answers while preserving the point at which material evidence ends and medical judgment begins. [So01][So05][So16][So20]

Evidence quality depends on matching the question to the record. A fineness mark can support a narrowly framed fineness statement; a supplier specification can support what it explicitly covers; a component record can describe the named part; and a test report can support the analyte, surface, sample, method, conditions, and date stated in that report. None of these records becomes stronger by being summarized more broadly. When an answer moves from a documented component to the entire finished object, from a tested sample to every production unit, from content to release, or from release to an individual outcome, it has crossed an inference boundary. The correct editorial response is to narrow the wording, identify what remains unknown, and request evidence at the level of the proposed claim. This discipline is especially important for short answers, tables, snippets, and product-support responses, where omitted qualifiers can change a bounded statement into an unsupported universal. [So16][So18][So20][So21]

Uncertainty should be reported in layers rather than hidden behind a single conclusion. The observed color may be known while the transferred material is unknown. The primary alloy may be documented while a solder joint or clasp remains undocumented. A component's content may be known while its release under relevant conditions is untested. A surface result may exist while individual compatibility remains outside what the result can establish. These are not equivalent gaps, so the paper should name the unresolved layer precisely. Phrases such as 'the available record does not identify the contact component' or 'this source addresses content, not release' are more informative than a generic disclaimer. They tell the reader exactly what evidence would be required for a stronger material conclusion while preserving the medical firewall. The same method prevents visual observations from becoming diagnoses and prevents broad labels from becoming promises. [So05][So16][So20][So21]

For publication scope, every future revision should preserve four controls. First, keep the visible observation separate from the proposed mechanism. Second, retain component, surface, sample, method, and lot qualifiers wherever the source requires them. Third, keep seller language descriptive: documented construction and test information may be stated, but individual outcomes and unverified product-wide assurances may not. Fourth, route authenticity methods, cleaning procedures, regulatory compliance, and medical judgment back to their established related evidence areas instead of rebuilding them here. These controls make the paper useful without pretending that one article, one label, or one laboratory result resolves every question about a finished jewelry object. They also provide a stable basis for later fact checking: a reviewer can trace each paragraph to its claims and sources, see where uncertainty is intentional, and identify any attempted scope expansion before release. [So16][So18][So20]

A visible mark deserves an accurate description, not an automatic verdict. Color is an observation; material identity, surface transfer and medical diagnosis are different questions with different evidence requirements. In the same way, a primary material label is not a complete map of a finished jewelry object, and neither a label nor an object test guarantees an individual's response.

The most reliable approach is to identify what was observed, map the component and surface involved, and keep confirmed facts separate from plausible explanations and unknowns. When a question moves beyond jewelry or material evidence into diagnosis, treatment or individual medical prediction, this reference has reached its boundary.

Non-diagnostic consumer decision flow



Non-diagnostic consumer decision flow. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: Non-diagnostic consumer decision flow. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

13. Common Myths

Myth: Green skin means fake silver

Short answer: Color is not an authenticity test. **Why incomplete:** A green mark does not establish composition or authenticity. **Evidence:** [S016][S021] **Safe correction:** Treat it as an observation and use material evidence for authenticity. Paper 006 boundary; Paper 001 testing.

Myth: Green skin means allergy

Short answer: Color alone is not diagnosis. **Why incomplete:** Staining and dermatitis are different evidence categories. **Evidence:** [S001][S021] **Safe correction:** Separate visible color from symptoms and medical evaluation. Paper 006.

Myth: Green always means copper

Short answer: Copper is only one possible context. **Why incomplete:** Color cannot identify one material or compound. **Evidence:** [S021][S027] **Safe correction:** Keep copper conditional unless directly demonstrated. Paper 006.

Myth: A 925 item cannot leave a green mark

Short answer: 925 is not a transfer prediction. **Why incomplete:** It does not describe every component or contact condition. **Evidence:** [S016] [S017][S021] **Safe correction:** Treat fineness and visible transfer as separate questions. Paper 006.

Myth: Black marks mean fake silver

Short answer: Dark color is not an authenticity test. **Why incomplete:** A dark mark has multiple possible contexts. **Evidence:** [S016][S027] **Safe correction:** Use separate evidence for authenticity. Paper 006/Paper 001.

Myth: Every black mark is silver tarnish

Short answer: One mechanism is not established by color. **Why incomplete:** Object darkening, skin marks, and transfer are distinct observations. **Evidence:** [S027][S031] **Safe correction:** Describe location and transfer before interpretation. Paper 006; Paper 001 chemistry.

Myth: Black marks prove poor quality

Short answer: Color is not a quality classification. **Why incomplete:** Quality and visible transfer require different evidence. **Evidence:** [S027] **Safe correction:** Do not infer workmanship or value from color alone. Paper 004/Paper 006.

Myth: 925 always means nickel-free

Short answer: Fineness is not a nickel statement. **Why incomplete:** The mark does not identify every balance element or component. **Evidence:** [S016][S017] **Safe correction:** Require separately scoped nickel evidence. Paper 006/Paper 009.

Myth: 925 proves nickel is present

Short answer: The opposite universal is also unsupported. **Why incomplete:** The mark alone answers neither presence nor absence. **Evidence:** [S016][S017] **Safe correction:** State that nickel status is unknown from 925 alone. Paper 006.

Myth: 925 tells every metal in an item

Short answer: A finished item may have multiple components. **Why incomplete:** The number is not a complete bill of materials. **Evidence:** [S016][S021] **Safe correction:** Map the whole object and its contact surfaces. Paper 006.

Myth: Nickel content and nickel release are identical

Short answer: They are different measurement targets. **Why incomplete:** Presence in material does not equal release from a surface. **Evidence:** [S020][S030] **Safe correction:** Name the tested target, method, surface, and conditions. Paper 006/Paper 009.

Myth: No detected release proves no nickel content

Short answer: Release and content cannot be substituted. **Why incomplete:** A scoped surface result is not a total-composition result. **Evidence:** [S020][S030] **Safe correction:** Keep the conclusion within the method. Paper 006/Paper 009.

Myth: Sterling silver is always hypoallergenic

Short answer: A material label cannot guarantee response. **Why incomplete:** Components and individual variability remain unresolved. **Evidence:** [S001][S005][S016] **Safe correction:** Define the term and its evidence scope. Paper 006.

Myth: Sterling silver is never hypoallergenic

Short answer: The opposite universal is also unsupported. **Why incomplete:** A broad label does not determine every product or wearer outcome. **Evidence:** [S001][S016] **Safe correction:**

Avoid universal compatibility claims in either direction. Paper 006.

Myth: Hypoallergenic means allergy-proof

Short answer: The term is not an individual guarantee. **Why incomplete:** Its meaning and evidentiary scope vary. **Evidence:** [S001][S018] **Safe correction:** Explain exactly what documentation supports. Paper 006.

Myth: All parts have identical composition

Short answer: Finished jewelry can be an assembly. **Why incomplete:** Solder, findings, posts, coatings, and bodies may differ. **Evidence:** [S016][S021] **Safe correction:** Keep evidence component-specific. Paper 006.

Myth: The clasp must match the chain

Short answer: A functional finding may have separate documentation. **Why incomplete:** Main-body evidence does not automatically cover a clasp. **Evidence:** [S016][S021] **Safe correction:** Verify the named contact component. Paper 006.

Myth: Plating reveals the underlying material

Short answer: Surface appearance is not a composition map. **Why incomplete:** Layer and substrate are separate questions. **Evidence:** [S020][S021] **Safe correction:** Document both layer and underlying construction. Paper 006.

Myth: Plating permanently prevents reactions

Short answer: No permanent compatibility guarantee follows. **Why incomplete:** Coverage, condition, wear, and other components matter. **Evidence:** [S020][S021] **Safe correction:** Describe plating without biological promises. Paper 006/Paper 009.

Myth: A home object test diagnoses metal allergy

Short answer: Object and person tests answer different questions. **Why incomplete:** Diagnostic patch testing is clinician-led. **Evidence:** [S003] [S010][S020] **Safe correction:** Do not use object results as diagnosis. Paper 006.

Myth: Expensive jewelry cannot leave marks

Short answer: Price is not material or medical evidence. **Why incomplete:** Construction and contact conditions require direct evidence. **Evidence:** [S001][S016][S021] **Safe correction:** Do not infer outcome from price. Paper 006.

Myth: Past wear without a mark guarantees future compatibility

Short answer: Past experience is not a universal prediction. **Why incomplete:** Material, surface, contact, and individual context can differ. **Evidence:** [S001][S005] **Safe correction:** Treat later observations as new observations, not proof. Paper 006.

14. Frequently Asked Questions

Why does jewelry turn skin green?

A green mark is an observation. Copper-related transfer is one possible context, but color alone cannot identify the material, compound, component, or medical cause. [S021][S027]

Does green skin mean fake jewelry?

No. Skin color is not an authenticity test. Authenticity requires appropriately scoped material and marking evidence. [S016][S021]

Can sterling silver turn skin green?

A 925 mark does not predict whether a green mark will occur because it does not describe every component, surface condition, or contact context. [S016][S017][S021]

Does green skin mean I am allergic?

No diagnosis follows from color alone. Allergic contact dermatitis is a medical diagnosis; a visible stain and a clinical condition are different evidence categories. [S001][S003]

Does green skin always mean copper?

No. Copper may be one possible context, but green color alone does not prove copper or a single mechanism. [S021][S027]

Why does jewelry leave black or gray marks?

Dark marks can arise in more than one object, surface, environmental, or transfer context. Color alone cannot establish one mechanism. [S027][S031]

Does a black skin mark mean silver is fake?

No. A dark mark is not an authenticity or quality test. Those conclusions require separate evidence. [S016][S027]

What does a 925 stamp mean?

In context, 925 communicates a silver-fineness claim of 925 parts silver per 1,000. Paper No.001 owns the full hallmark and authenticity framework. [S016][S017]

Does 925 mean nickel-free?

No universal inference is possible. The mark provides fineness information; nickel content and nickel release require separate, appropriately scoped evidence. [S016][S017][S020]

Can sterling silver contain nickel?

The 925 number alone cannot answer that question. Evidence must cover the defined alloy, component, layer, item, or lot. [S016][S017]

Is sterling silver hypoallergenic?

A universal answer is not supported. The term does not replace evidence about components, surfaces, exposure, or individual response. [S001][S016]

Does hypoallergenic mean allergy-free?

No. It should not be treated as a guarantee that no individual will report a reaction. Its meaning and evidentiary scope must be defined. [S001][S005][S018]

Can different parts of one jewelry item contain different metals?

Yes. A finished object may include a main body, solder, findings, posts, clasps, coatings, plating, and other components. Evidence for one part does not automatically cover all parts. ^{[So16][So21]}

What is nickel release?

Nickel release concerns nickel leaving a defined contact surface under specified test or exposure conditions. It is not the same question as total nickel content. ^{[So20][So30]}

Is nickel content the same as nickel release?

No. Content asks whether nickel is present in a defined sample; release asks what leaves a defined surface under stated conditions. ^{[So20][So30]}

Can plating affect what contacts the skin?

Yes. A surface layer may be the immediate contact material while present, but its identity, coverage, condition, and wear scope matter. ^{[So20][So21]}

Can appearance identify which metal caused a mark?

No. Appearance can document color and location but cannot identify hidden composition, transferred chemistry, or medical cause. ^{[So01][So21]}

Can a seller know whether I will react to an item?

A seller can report documented material and test information, but cannot guarantee an individual's medical compatibility from a label, mark, or photograph. ^{[So01][So16][So18]}

Is skin staining the same as dermatitis?

No. Staining describes visible color transfer or change; dermatitis is a medical concept. Appearance alone cannot establish dermatitis. ^{[So01][So02]}

Can a home nickel or object test diagnose allergy?

No. An object test addresses an object within its method; diagnostic patch testing is clinician-led and concerns a person. This paper gives no testing instructions. [S003][S010][S020]

What can 925 tell me about skin compatibility?

It supplies fineness information, not a prediction of nickel release or individual compatibility. Those are separate questions. [S016][S017][S020]

When should this article stop interpreting a skin reaction?

It stops when the question requires diagnosis, treatment, symptom scoring, clinical test interpretation, or individual risk prediction. Those require an appropriate professional context. [S001][S003][S013]

15. Consumer Evidence Checklist

1 Record the color, location, timing and whether the mark is on the skin, object or both.

2 Identify the exact component and contact surface involved.

3 Check whether documentation names the material, layer, method, sample, lot and date.

4 Keep fineness, nickel content, nickel release and individual response as separate questions.

5 Do not use price, appearance or a 925 mark as a diagnosis or authenticity shortcut.

6 Stop self-interpretation when a reaction is persistent, painful, spreading or otherwise concerning and seek appropriate professional evaluation.

Evidence and documentation checklist



Evidence and documentation checklist. Evidence diagram; version 2.0; reviewed 2026-08-17.

Accessible fallback: Evidence and documentation checklist. Treat each box as a separate evidence question. The diagram does not identify a material, diagnose a condition or predict an individual response.

Source note: synthesized from the cited evidence boundaries in this paper. Limitation: conceptual map, not a test or diagnostic tool.

16. Glossary

Allergic contact dermatitis	A clinician-evaluated inflammatory skin condition involving allergy; not identifiable from jewelry color alone.
Alloy	A metallic material made from two or more elements; a fineness mark does not necessarily list each one.
Authenticity	Whether an item matches its represented identity; skin color is not an authenticity test.
Coating	A surface layer applied over another material; its scope, coverage, and condition matter.
Compatibility	A bounded description of how an item and wearer coexist; it is not guaranteed by a material label.

Component	A distinct part of a finished object, such as a clasp, post, joint, or body.
Contact surface	The part or layer that actually touches skin in the relevant use.
Copper context	A possible material-transfer context for some green observations, not a conclusion from color.
Dermatitis	A medical category of skin inflammation; this paper uses it only for definition and boundary.
Diagnostic patch testing	A clinician-led method for evaluating contact allergy; it is not an object test.
Evidence boundary	The point beyond which available evidence cannot support a stronger conclusion.
Exposure	Contact with a material or substance under defined circumstances; it is not itself diagnosis.
Finding	A functional jewelry part such as a clasp, jump ring, post, or backing.
Fineness	The proportion of precious metal represented in a material, commonly expressed in parts per thousand.
Finished object	The complete assembled item, including its body, joints, findings, layers, and nonmetal parts.
Green discoloration	A visible green mark or color change whose cause is not established by color alone.
Hypoallergenic	A term requiring defined scope and evidence; it must not be treated as allergy-proof.
Individual response	A person's reported or clinically evaluated experience; it cannot be predicted from 925 alone.

Irritant contact dermatitis	A medical form of contact dermatitis not synonymous with allergic contact dermatitis.
Material label	A name or mark describing a material attribute; it is not a complete object or response profile.
Nickel content	The presence or amount of nickel in a defined material, sample, layer, or component.
Nickel release	Nickel leaving a defined contact surface under stated test or exposure conditions.
Observation	A description of what was seen or reported before assigning a cause.
925	A fineness representation of 925 parts silver per 1,000 in its applicable context.
Plating	A deposited surface layer over a substrate; appearance alone does not establish its full construction.
Sensitization	A medical/immunologic concept kept outside individual prediction in this paper.
Skin discoloration	A visible change in skin color; it is broader than and not synonymous with dermatitis.
Skin staining	Visible deposited or transferred color on skin, described without assigning medical cause.
Solder	Joining material that may differ from the primary body and requires its own evidence.
Sterling silver	A silver-fineness category; detailed composition and authenticity belong to Paper No.001.
Visible mark	A neutral description of a color or appearance change at a jewelry contact area.

17. Methodology, Limitations and Related Research

Methodology: this paper maps claims to cited medical, regulatory, conservation and material-context sources, then limits each conclusion to the source's actual object, population, method and jurisdiction.

Limitations: this publication does not test a MENSSKULL product, identify an individual cause, provide diagnosis or treatment, interpret clinical tests, or issue a market-specific compliance decision.

Related Research

- Paper No.001 — 925, fineness, hallmarking, testing and material claims
- Paper No.004 — visible condition, possible concern and confirmed defect
- Paper No.005 — care, cleaning limits and stop conditions
- MENSSKULL Research Library

18. Update History and References

Update History

August 17, 2026 — initial publication.

Sources are used only within their recorded boundaries. A citation does not expand a source from a defined material, component, population, method, or jurisdiction to a universal claim.

1. **S001** — American Academy of Dermatology. *Itchy rash could be contact dermatitis*.
Evidence Tier 1. Primary use: Symptoms/avoidance prompts; does not permit diagnosis.

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2. **So02** — American Academy of Dermatology. *Contact dermatitis signs and symptoms*. Evidence Tier 1. Primary use: Clinical symptom context. Accessed 2026-08-10.
3. **So03** — American Academy of Dermatology. *Patch testing can find what's causing your rash*. Evidence Tier 1. Primary use: Clinician-led patch testing and limits. Accessed 2026-08-10.
4. **So05** — PubMed / Contact Dermatitis. *Nickel allergy and allergic contact dermatitis: A clinical review of immunology, epidemiology, exposure, and treatment*. Evidence Tier 1. Primary use: Prevalence must retain population/date/method. Accessed 2026-08-10.
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7. **So10** — PubMed / Dermatitis. *Patch Testing With Nickel, Cobalt, and Chromium in Patients With Suspected Allergic Contact Dermatitis*. Evidence Tier 1. Primary use: Clinical patch-test cohort; referral population. Accessed 2026-08-10.
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10. **So16** — eCFR. *16 CFR Part 23 Jewelry Guides*. Evidence Tier 1. Primary use: US fineness/marketing context; not medical evidence. Accessed 2026-08-10.
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13. **So20** — EUR-Lex. *REACH Annex XVII nickel entry*. Evidence Tier 1. Primary use: EU jurisdictional boundary context only; not a universal product conclusion. Accessed 2026-08-10.
14. **So21** — DermNet NZ. *Jewellery allergy*. Evidence Tier 2. Primary use: Dermatologist-reviewed education; wording cross-check. Accessed 2026-08-10.
15. **So27** — Canadian Conservation Institute. *Care of silver*. Evidence Tier 2. Primary use: Surface/tarnish context belongs to Papers 001/005. Accessed 2026-08-10.
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17. **So31** — FDA. *Allergens in cosmetics*. Evidence Tier 1. Primary use: Cosmetic co-exposure context; not proof of jewelry mechanism. Accessed 2026-08-10.