

Poodle Colors, Patterns and Disqualifiers

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The poodle has been at the top of the popularity charts for decades due to their intelligence; versatility in effortlessly going from stunning show dog to performance dog, service dog, or pet; and for their glorious coats that are ever-growing and able to be styled in seemingly endless traditional, fun, and unique styles. Often missed is the fact that poodles historically come in a wide variety of colors and patterns. In fact, almost every combination of colors and patterns, other than merle and albino, are inherently present in the breed. This article will lightly cover the various colors, patterns, mutations, injury effects on color, and disqualifying colors.

Solid-Colored Poodles

Solid-colored poodles are described as any solid color or varying shades of the same color. They will be a solid color at the skin. If they are affected by the progressive graying gene (to be discussed later), their color will vary as it changes from the darker puppy coat to their final adult shade. For example, the transition from black to silver happens gradually so the coat will naturally have varying shades from black to silver.

Solid coat colors are broken down into two groups: black-based (black nose, foot pads, and eye rims) and brown-based (brown nose, foot pads, and eye rims), as determined by the "B" locus of their DNA. A black-based dog will be B/B or B/b, and a brown-based dog will be b/b. Genetically solid-colored poodles will be KB/KB, KB/ky, or KB/kbr at the "K" locus of their DNA, as well as S/S at the "S" locus (exceptions apply; see paragraph on abstract and recessive black).

Some poodles that are genetically multi-colored can appear solid due to shaded sable, progressive graying, low expression mutations, or recessive black, which is discussed in another section. Often DNA color testing is the only way to tell if a solid dog is genetically solid. In the UKC, solid- and multi-colored poodles are judged as if they are two different breeds. For show purposes, a genetic multi-color that does not display a multi-color pattern and appears solid would show as a solid, as the judge will consider phenotypes (how the dog looks) rather than genotype (hidden genetic color).

Black-based solid poodles can be black, blue, or silver, depending on the inherited progressive graying gene (discussed later). Blue and silver poodles are born black-colored and "clear" to their true color as they mature. A silver puppy will have a silver face at a very early age, by 6 weeks, making it

unmistakably silver, whereas a blue may not begin clearing until 2 years of age. Therefore, it is often difficult to know if a dog is a true black or a blue puppy unless you are certain of non-graying lines. Many poodles do change color over the course of months or years. For this reason, many poodles are AKC registered as their puppy color rather than their mature color, making it difficult to determine the true progressive graying in the lines when using pedigree research.

Black-based poodles who are also e/e at the "E" locus will be red, apricot, cream, or white but are still black-based if they are B/B or B/b. It is interesting to note that the spectrum from red to white is genetically identical. There are "intensity" tests that are said to help determine how light a poodle in this color range will clear and what depth of color they will pass on to their offspring.

Brown-based poodles will be brown, cafe au lait, or silver beige, depending on their inherited progressive graying genes. As in blacks, the brown-based poodles are born darker brown and clear as they mature. The lighter of the brown-based poodles, silver beige, will be evident by 6 weeks of age. Their faces will be noticeably lighter while cafe au lait may not begin clearing until after 1 year of age. Cafe au lait can be so light at maturity that it is challenging to distinguish it from silver beige without knowing at what age they began clearing.

It is worth noting that the correct terminology for b/b poodles is "brown" rather than "chocolate"—or any other non-poodle breed-specific color terms.

Red, apricot, cream, or white poodles can also be brown-based. Although black pigment is preferred for show purposes, reds and apricots with brown pigment are acceptable within the UKC standard. Brown-based creams and whites, while lovely pets, will be faulted in the UKC show ring.

Multi-Colored Poodles

Nearly a century ago, in 1932, when the Poodle Club of America wrote the breed standard for the poodle, they left out all patterns in favor of the solid-colored poodle. For many years, multi-colored poodles were taboo and were often culled when they presented in a litter. But times are always changing, and the multi-colored poodles began to find their well-deserved following. These days, beautiful, well-bred puppies in all patterns are readily available. Although recognized by the AKC for registration, they are still a disqualified color for AKC conformation competition. However, they may participate and title in any other AKC event. Multi-colored poodles can compete and earn titles in the UKC conformation and applicable performance events.

Parti: The most easily identified multi-colored poodle is the "parti," distinguished by their beautiful splash of color on a white background. The standard states that a parti is any color or pattern with at least 50% white. They can be of any combination on the "K" locus. All of the aforementioned solid colors, as well as multi-colored patterns—sable, brindle, and phantom (to be discussed later)— combined with 50% or more white is a parti poodle according to the UKC Multi-Color Poodle Standard. Parti is determined by sp/sp at the "S" locus. It is entirely possible for an sp/sp poodle to have less than 50% white, such as the "tuxedo" pattern that often has a colored head, neck, and body, with white legs and chest. Technically, their white covers less than 50% of their body, but they

are still genetically parti if they are sp/sp and will always pass a copy of the parti gene to their offspring.

Parti-Carrier: A poodle that is S/sp is called a "parti carrier." They may not present with any white at all and would be considered solid for show purposes, but they can produce parti offspring when bred to a parti or another parti carrier. A parti carrier may have varying degrees of white; often white chest, chin, and/or feet markings; and would be shown as a multi-color. Normally, a parti-carrier's white markings will consist of less than 50% of their coat and they would be considered an "abstract."

Abstract: The UKC Multi-Color Poodle Standard refers to any poodle with less than 50% white combined with another color or pattern as an "abstract." They are sometimes referred to as "mismarked" by those referring to the AKC Poodle Standard, as it does not allow for any color other than solid. Many abstract poodles are parti-carriers (S/sp), but since other mutations can cause white marks, not all abstracts are parti-carriers. Some abstract poodles have tiny white markings that disappear by the age of 6 to 8 months and may be shown as solid-colored poodles.

The multi-colored patterns affected by the "A" locus come into play when a poodle is ky/ky, kbr/ky, or kbr/kbr at the "K" locus, which allows "A" locus expression. The four "A" locus genes are ay (sable), aw (agouti), at (phantom), and a (recessive black). All of these patterns can be black-based or brown-based and combined with parti or abstract.

Sable: Sable poodles will be ky/ky and ay/-. The gene in the second position is "carried" and may be passed to offspring, but as the "ay" gene is dominant this poodle will be sable no matter what the second gene in the "A" locus is. Sables are born black or brown (depending on their "B" locus genes) or with varying degrees of lighter shades of tan over their head, body and/or feet—or possibly in a "faux phantom" pattern—presenting with the lighter coloring on their lower legs and under their tails. They will lighten considerably by the age of 6 weeks and continue to appear lighter and lighter as their dark hair tips are cut out. Some sables may clear to an almost white or cream with dark ears (until dark tips are eventually cut out as well). Some sables are affected by a mutation called "shaded sable" and will keep various degrees of darker shading on their back and necks. Most color panels do not have a test for this mutation, although one lab has identified the markers and made a test available. Other labs will likely follow soon.

Agouti: The next dominant pattern on the "A" locus is "aw" agouti, dominant to phantom and recessive black. It is sometimes referred to as "wild sable" or "wolf gray." Similar to sable and often confused with it, agouti is distinguished by bands of color on each hair. Like sable, they are born dark (black or brown depending on their "B" locus) and lighten quickly. They do often keep quite a bit of shading over their bodies, similar to a shaded sable.

Phantom: The third pattern on the "A" locus is "at" phantom, a breed-specific color term known as "tan point" in other breeds. It is easily recognizable by the Doberman-type chest, leg, and face points. Black or brown phantoms can have points in various shades of red, apricot, cream, or white. These points may fade with age and appear silver. Phantoms can be affected by a "creeping phantom" or "creeping tan" mutation that causes their points to spread further than normal, as well as a "low

expression" mutation that can make them appear with lesser points or even solid. Genetically, phantoms must be ky/ky and at/at or at/a. Also affected by progressive graying, phantoms can be blue, silver, cafe, or silver beige as well. Combined with a "kbr" they will be "brindle point phantoms" with brindle stripes in the face, leg, and chest areas. All phantom colors can be combined with parti and are sometimes called "tri-colored," although in poodles, the preferred term is "phantom parti."

Recessive Black: The fourth gene on the "A" locus is "a" recessive black. Since it is the least dominant, any other "A" locus gene will take precedence over it. If a poodle has two copies (a/a), they will appear solid.

Brindle: Brindle is a pattern of darker stripes on a lighter background. It requires kbr at the "K" locus and an "ay" sable gene at the "A" locus. It is recessive to the "KB" gene in that a poodle that is KB/kbr will not be brindle, but dominant in that it only takes one brindle parent to produce brindle offspring. Brindle must be kbr/ky or kbr/kbr. Most labs cannot test for brindle and will always return a KB/ky result, which is incorrect. If the poodle is visibly brindle, she is kbr/ky or kbr/kbr. If she has a brindle parent but is not visibly brindle, she may be KB/kbr, that is, carrying brindle and able to produce brindle puppies. Brindle puppies are often born dark or with patterns similar to sable puppies, making it sometimes difficult to confirm their pattern until tails are shaved at 4 to 6 weeks old to find the stripes at the skin. Black-based brindle puppies often have colorful brown or red tones as puppies, but most will clear to black/blue and silver quickly by around the age of one year (as always, some exceptions apply). Their brindle markings may even clear to blue by the age of 4 to 6 years. Brown brindles seem to clear to a solid cafe au lait color a little quicker, possibly by 3 years of age. Brindles are often confused with merle, which may have similar coloring but in more of a spotted rather than striped pattern. DNA color panels definitively identify the difference, but an experienced eye can easily tell as well.

Reverse Brindle or "Black" brindle: A brindle that has excessive striping that makes it seem almost solid black are called "Reverse" or "Black" brindle. Their stripes may be seen in certain lighting, or they may be so dark as to appear solid. No gene has been identified for this mutation. Some black brindles may be the result of the shaded sable mutation (more on that below).

Brindle Point Phantoms: As mentioned previously, brindle can be combined with phantom genes to produce a brindle-pointed phantom. Brindle-pointed phantoms have brindle stripes in the normally phantom-pointed areas of the chest, leg, and face. Genetically, they are kbr/ky or kbr/kbr and at/at or at/a. Some brindle points are so low in expression that they appear solid.

Any of the above "A" locus patterns will be blocked if the poodle is also e/e. This poodle will be red/apricot/cream/or white. They can be parti or abstract, but not patterned. They can produce patterns if bred to a poodle who does not carry red but can also produce patterns.

Mutations and Injury Discolorations

Along with the multitude of genes that can fall into several combinations to produce the plethora of colors and pattern combinations in our breed, we also have several mutations that are not identified by testing but participate in creating even more variations in the poodle coat color.

Shaded Sable: A previously untestable mutation; there is one lab that is said to offer a test for it now. At the time of this writing, it is still not included in most of the lab's color panels, but progress is being made. Shaded sable, as in the name, affects "ay" poodles, sable, and brindles. A sable poodle, rather than clearing in an almost solid cream or silvery white color, will keep a dark coloring on their back in varying intensity. A brindle affected by this mutation may show very little body stripes and may look more like a brindle-pointed phantom or even appear solid. We will understand more as more people take advantage of the test.

Seal: Again, an untestable mutation that appears to affect "KB" poodles that are sable at the "A" locus. As puppies, they have faces and legs that are darker than their body color. It is a striking color pattern that puppies often lose in just a few months as they level out to a more solid color. As with everything, there may be exceptions.

Ticking: The spotted pattern that affects the white areas on parti poodles. Just as Dalmatians are born without their spots, ticking is not apparent on newborn poodle puppies and presents itself as they age. Not all parti poodles have ticking, but many do, to some extent.

Progressive Graying: The mutation in poodles that causes them to "clear" from their darker puppy color to a lighter adult color, as black clears to silver. It makes sense to assume the dilute gene is responsible for their color change when, in fact, the DNA-testable dilute gene is not the culprit in the case of the poodle. The exact mode of transmission for progressive graying is not known. However, it appears to be an incomplete dominant gene, with a non-fading black poodle having zero copies of progressive graying, a blue (one copy), and a silver (two copies). Each parent contributes one. This seems to work well in determining expected shades in solid and parti litters. It gets more complicated in the patterned dogs, as it is more difficult to visually see how many copies of progressive graying a sable or brindle may have. A mutation identified in the KITLG gene is thought to explain most silvers, but no exact DNA test is available due to the unusual type of mutation.

Progressive graying solid-colored poodles are often mistaken for multi-colored due to the varying shades of color in their coat as they clear. They may even take on a phantom appearance when their legs lighten first or a sable appearance when their ears naturally hold onto their darker puppy shade when the ear hair is cut less often. The varying shades of the same color are perfectly natural and do not indicate any sable or phantom pattern, with which they are sometimes confused. An experienced eye can easily distinguish between a clearing poodle and a patterned one.

Low Expression: Low expression is a mutation that affects "at" phantom poodles. While some phantoms have clearly marked points, others have less, and some genetic phantoms have no phantom points at all. It may be linked to the shaded sable mutation, as there is an example of a

shaded sable dam producing a no-expression phantom. It is theory until more data is available from the new shaded sable test.

Somatic Mutations: Somatic mutations are rare and occur in a small number of cells as the embryo develops. As those cells divide and differentiate into pigment cells, they can create a dark patch on dogs that are genetically solid. These mutations most frequently occur in red-spectrum dogs. Since the source of the mutation is not from germ line cells, they are not passed to the next generation. However, a predisposition for somatic mutations may occur in certain lines; therefore, some breeders choose not to breed them. Somatic mutations are distinctly separate from merle (discussed later).

Creeping Tan: This modifier affects phantom poodles and causes their lighter-colored points to spread further than on an unaffected phantom. Phantoms affected by progressive graying may appear to have a creeping tan pattern as they change from their dark puppy color to their final mature color, but this is not necessarily the case.

Injury Coloring - A phenomenon that causes progressive graying colored poodles to produce hair in their original puppy color on areas where they may have had skin irritation. It does not have to be the result of a significant injury. A silver poodle will grow back black hair in areas where she may have gotten a scratch, bug bite, mat, or even on the elbows and hips just from the pressure of lying down while sleeping. The stark contrast between the black and silver hair is quite noticeable. It is unfortunate for those who like to show their poodles, as this darker color on an otherwise solid dog is quite misunderstood and sometimes confused with merle coloring. It is perfectly natural and rather unavoidable if the dog is ever outside exercising or working. The injury coloring may be prominent for 2 years or more, depending on how long it took the poodle to originally clear. It is not difficult for a trained eye to tell the difference between injury discoloration and a merle pattern, and of course, DNA testing can prove the lack of merle genes.

Disqualifying Colors and Patterns

As previously mentioned, merle and albino are two colors, patterns, or mutations that are historically not available in the poodle.

Merle: As with other breeds, merle has been introduced into the poodle breed by crossing with a breed that carries the gene. The first generation of such a mating would produce obvious mixed breeds. However, after only a few generations of breeding back to a poodle, most of the poodle characteristics can be brought back in while keeping the dominant merle gene. They may even test as 100% poodle in a breed DNA profile. There have always been mixed breeds and always will be, but a larger problem arises when a breeder is dishonest about parentage and registers such a litter with AKC. The American Kennel Club is based on the honor system, and any dishonesty of parentage muddies our sacred pedigrees that we study to better the breed, and forever renders them incorrect and useless. For an accurate and useful registry, no puppies from any merle breeding, no matter their color or pattern, should be AKC or UKC registered. Any descendants of merle-colored cross-bred dogs, no matter how far back in the pedigree the merle was, and regardless whether they are AKC-registered, are not purebred and are the result of previously falsified registration papers.

Health issues are also a problem with the merle gene in the poodle gene pool. Since poodles can be e/e, which covers all patterns, a merle dog can be red, apricot, cream, or white and not noticeably appear to be merle (or "hidden merle"), making it more likely to breed two merle dogs together accidentally. When two merles are bred together, there is a great chance of producing "double merles," meaning the puppy receives a copy of the merle from each parent. Double merle frequently creates either eye or ear deformities (or both) that can lead to total deafness and blindness.

Highly prevalent in some of the naturally occurring merle breeds such as Collies, Australian Shepherds, Shetland Sheepdogs, and others, is the MDR1 gene mutation, which can result in severe or life-threatening complications from some medications. Since these breeds were used to create the merle poodle, the mutation is now in our gene pool, and it can be passed to any progeny from one of these mixed unions, no matter their color or pattern. Unsuspecting veterinarians could easily prescribe an inappropriate medication or anesthesia, not knowing the individual dog's true lineage.

Albinism: This is a genetic mutation that causes a lack of melanin production, the pigment that produces hair and skin color. It comes with several health issues beyond this article's scope. Suffice it to say that it is not an acceptable color in the show ring in either AKC or UKC. True albino dogs will have pink noses, eye rims and skin, white hair, and blue eyes. Not to be confused with a white poodle with a black nose, eye rims, and dark eyes (a correct poodle color), or even a white poodle with a brown nose, which is not preferred and a fault in conformation, are still inherent color combinations in the breed. Merle genes can also produce a high white dog with blue eyes, but points will be dark, so it is not a true albino but also an unacceptable poodle color or pattern.

Summary

Depending on the dog's age and stage of progressive graying, their genes, and mutations, the shading of the different colors and pattern combinations are many. There is no "ideal" color or pattern, and coat color is not relevant to the quality of a dog. Each color or pattern is beautiful, and they each have their ardent admirers. We poodle enthusiasts are fortunate to be able to enjoy such a variety in our beloved breed.

Cream poodle puppy "clearing" (notice the darker hair on ears, neck and shoulders) and as an adult (with a trace of the cream on the end of the ear and neck hair):





Natural shading of a solid silver as it matures and "clears":



Black-based brindle Parti "Tuxedo" as a puppy and cleared to blue and white with ticking as an adult:



Black-based Brindle Abstract at puppy stage and at 1 year old:

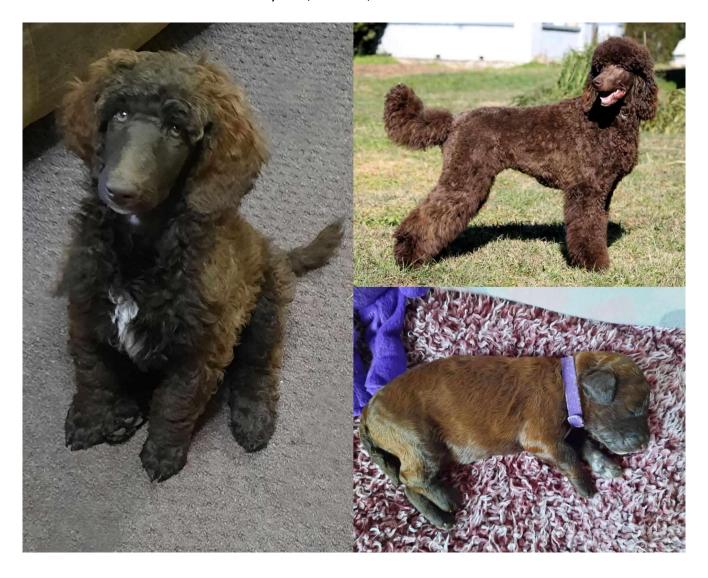




Progressive graying stages of café au Lait as well as low-expressing phantom (ky/ky at/a):



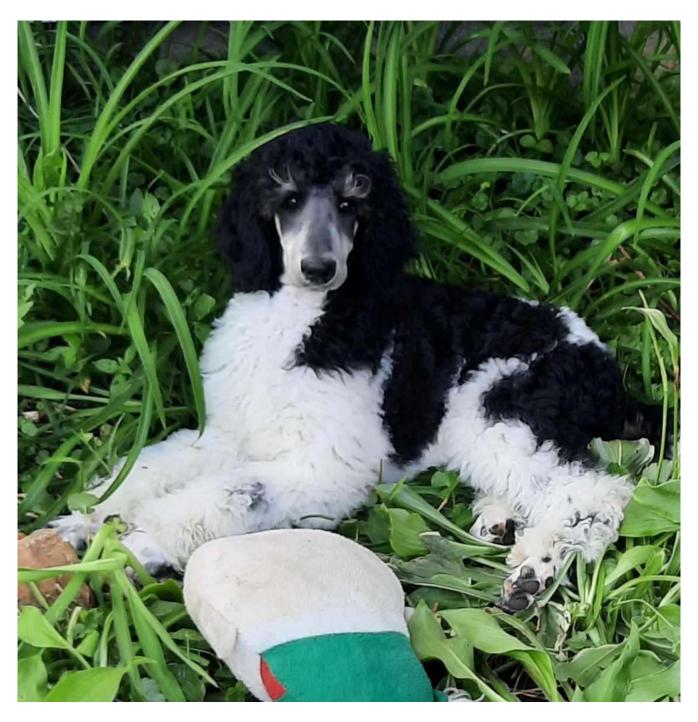
Brown-based seal abstract at a few days old, 9 weeks, and 10 months:



Brindle with shaded sable, or black brindle (kbr/ky ay/at):



Parti and phantom:



Café au lait with natural shading and injury spots (which will eventually fade and blend in):

