BASF European Color Report For Automotive OEM Coatings 2016



No.1 in Color

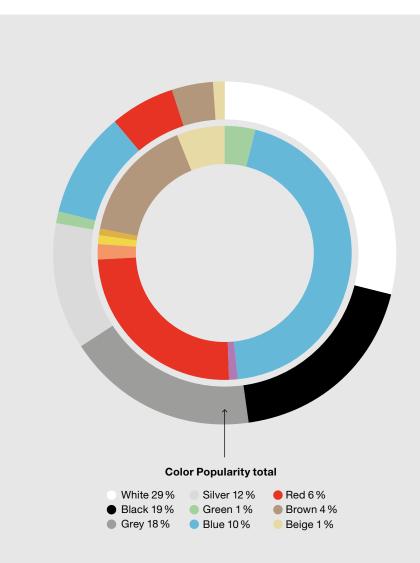
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The decision to buy a new car is based primarily on aspects that are technical and measurable: horsepower, fuel consumption and equipment. Nevertheless, for most end-consumers, buying a new car still tends to be an emotional undertaking, thus exterior and interior design are extremely important. The choice of color is one of the most relevant purchasing criteria. Automotive OEM producers use colors and special effects to highlight their car body shapes. Flip-flop effects in particular accentuate lines and "draw" edges. The perfect new col-

or should be unique and reflect the OEM's brand – based on overarching megatrends, industry-specific developments and the automotive producer's value proposition. As the leading European paint supplier, BASF's Coatings division collaborates closely with OEMs to create innovative, brilliant colors with an excellent fit. BASF publishes an annual Color Trend Collection in which it predicts the colors that will play a role for cars in the future.

"Automotive Color is an effective and rather easy way to make a real visual brand impression. Convincing and attractive colors are key to reach admiration from the audience."

Mark Gutjahr, Head of Design EMEA



Achromatic colors are still the European favorites

In 2016, most cars in Europe were painted either white, black, gray or silver. These colors accounted for roughly 78 percent of all cars. The overall picture showed no major changes compared to 2015. White remained the most popular color with 29 percent, retaining its popularity levels of recent years. This color becomes especially interesting when glossy and shimmery particles are added. White cars shining with a pearl effect are an increasingly common sight on European roads. Effects of this kind are also growing in other achromatic color segments, offering the end consumer a choice between pearl, metallic and solid shades. This also works with black as the second



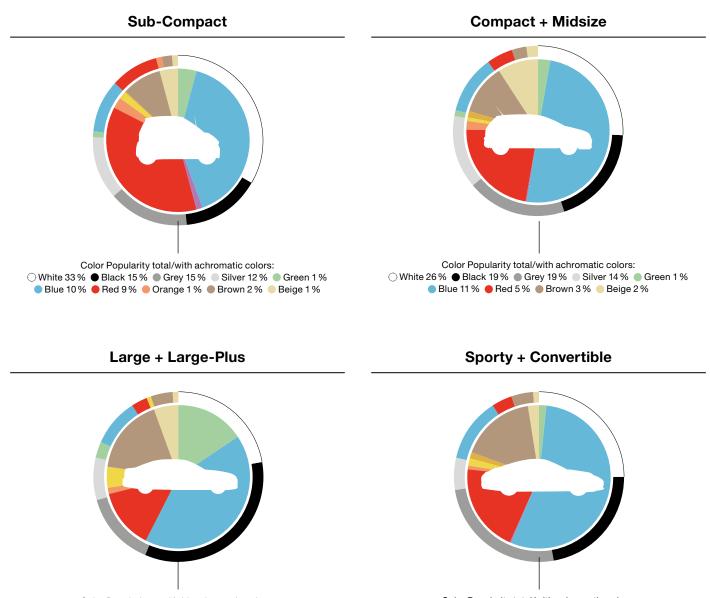
most popular color in Europe, accounting for 19 percent of all finishes. Gray is continuing its growth path of the last years. Today, with a share of 18 percent, it has nearly reached the popularity of black. This gain is accompanied by a reverse trend for silver. The classic metallic color, which was connected with state-of-the-art technology in the last decade, has seen decreasing shares during the recent years. In 2016, only 12 percent of the cars produced in Europe were finished with silver coatings.

Looking into the chromatic color range, the variety and number of shades gets bigger and the colors much brighter. The chromatic share remained at 22 percent in Europe, as was already the case in the previous year. The most popular chromatic color in 2016 was blue with an overall share of 10 percent. It gained one percent compared to 2015 and a further push is expected for the next years. Red is still the second most preferred color, with a constant share of 6 percent in the overall market. The



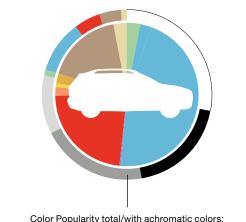
former trend color brown lost ground compared to 2015, reaching only 3 percent in 2016. The remaining 3 percent of European cars are finished in beige, green, orange, gold, purple and yellow, making them retain their positions as niche colors. In spite of their share, the variety of color shades and special-effect combinations in these chromatic areas is impressive. The section on color variety offers more in-depth information about this topic.

Color Popularity by Automotive Segments



Color Popularity total/with achromatic colors: OWhite 22 % Black 34 % Grey 14 % Silver 8 % Green 3 % Blue 9 % Red 3 % Yellow 1 % Brown 4 % Beige 1 % Color Popularity total/with achromatic colors: OWhite 25 % Black 22 % Grey 25 % Silver 6 % Blue 12 % Red 4 % Brown 4 % Beige 1 %

SUV



Color Popularity total/with achromatic colors: ○ White 28 % ● Black 19 % ● Grey 20 % ● Silver 11 % ● Green 1 % ● Blue 10 % ● Red 5 % ● Brown 4 % ● Beige 1 %

Color preferences and car segments

When we dig deeper, differences within the European car market can be observed. Which color is preferred for which type of car and how is the color used? Is there a correlation between the size of a car and the proportion of chromatic colors used? As the European market leader, BASF's Coatings division has a keen sense of how colors are used in regard to different car models. Depending on its length and construction type, every car model belongs to a distinctive car segment. This segmentation of the overall market permits a closer look at car types that are popular in Europe and specific color preferences that go along with certain model types.



The largest vehicle segment in Europe comprises **"compact" or "mid-sized"** cars. Together they represent one-third of the European automotive production and include both private and fleet cars.

Based on its large proportion, it is not surprising that the color shares in this segment are nearly identical to those of overall color popularity. The only exceptions are the higher shares of blue (11 percent) and silver (14 percent), and the lower share of white (26 percent), although it is also the most popular color in this segment.



SUVs comprise not just the second largest segment (22 percent), but also the most strongly growing one. This car type can be spotted on the roads in many different shapes and sizes, from urban mini-SUVs and crossover vehicles through to classic sport utility vehicles. They have already achieved a high level of popularity and the trend is unbroken.

In terms of color, gray showed a strong dominance with a share of 20 percent, also owing to the many shades and effects available. Brown is still a popular chromatic color and tends to be used more on bigger cars than on smaller models.



The **Subcompact** car segment is now in third place with a share of over 20 percent.

This segment evokes the message: the smaller the car, the lighter and brighter it is. Subcompact cars have the highest proportion of white (33 percent), the lowest share of dark and achromatic colors like blacks and grays (30 percent altogether), as well as highest percentage of red (9 percent). The proportion of chromatic colors is also higher than in all other segments.



The **luxury** car and **sports car segments** account for approx. 3 percent each and comprise a very nice and colorful niche market in the overall picture. When comparing these two segments, the difference is mainly visible on the chromatic color scheme.

Luxury cars have a very high share of black shades, but at the same time a comparably high proportion of green (3 percent). Added to intense shades of green, new darker shades give the car a very special, elegant look. Sports cars have a much higher focus on gray (25 percent) and shades of blue (11 percent), already gearing towards the upcoming colors in the overall market.

All other European cars fall into the segments of very small cars, minivans, pickups and vans, together accounting for 18 percent of the market.



"SUVs are still quite special vehicles – we are used to their unconventional look but still see huge potential for a distinct color palette."

Mark Gutjahr, Head of Design EMEA

Color Diversity-Or: Not all Blues are alike

As the Number 1 in color, BASF's Coatings division is a true expert when it comes to the world of color and its different shades, nuances, effects, and sparkles. Thinking innovatively and creating new visual attractions for the automotive industry is one part of our expertise - but the ability to bring these ideas to life and translate them into applicable paints is just as essential. More than 600 colors are constantly in the market. In contrast to the color popularity, which is dominated by achromatic colors, the winners in color variety are definitely not white and black. The highest number of shades is based in blue, which is available in more than 100 variations! Starting from a very dark black-blue or midnight blue that might be featured on a luxury car, via mid-bluish shades to a very light and silvery blue: all these colors are blue. Regardless of the color itself, automotive OEM



car manufacturers work with different effects to create either a solid or an effect shade. To compose the desired target color space, effect pigments are included. Aluminum, pearlescent or glass-flake pigments are taken either "pure" or in combination to create a new color. These different parameters allow this huge variety of colors - and the possibilities are not limited to chromatic colors. Gray is the best example: with approx. 90 different shades, it ranges from dark anthracites to mid-gray color spaces, from solid shades to effect coats, enhancing the OEM brand personalities behind them.



"This wide range of possibilities for car colors also goes hand in hand with the social megatrend toward individualization. Nowadays, end customers are able to select unique, personalized colors for their cars. BASF Coating's experts for individual colors are able to translate individual ideas into applicable car colors – on top of the colors introduced by the OEMs every year."

Stefan Sickert, Head of Product Management Basecoat