

Olive Drab History

The US Olive Drab was an outgrowth of RFC green, the WWI aircraft colour used by the British.

Although primarily an outer camouflage colour, the use of Olive Drab is documented in some cases also for cockpits like on P-38s and L-4s.

Olive Drab has also gone through some significant evolutionary changes.

During the period 1938 - 1945 there were at least 4 official Olive Drab specifications for the USAAC/USAAF/Navy.

- 1; Pre-war Olive Drab shade No. 31.
- 2; Dark Olive Drab shade 41.
3. Olive Drab FS-34087
- 4; Olive Drab ANA 613 (*FS-34087*).

Shade No. 31 und No. 41 dates from the Vintage time (*From 1919 there was the Quartermaster Corps Spec. 3-1, at first the numbers 1 to 24. Later the numbers 25 bis 48. Many do have an Equivalent with the later Air Corps FS-Number. The numbers 35 to 40 unfortunately are up to day totally unknown!*).

Prior to World War II, the standard Olive Drab shade of the USAAC was called Olive Drab No. 31. In 1939, when Army and Navy planned to get together with a new Standard (*ANA, but this endured till 1943 !*), and it was decided that No. 31 was too light, and should be substituted by a Dark Olive Drab. The "new" paint (**which actually had been available since 1932!**) was designated Dark Olive Drab shade 41, but the word dark was used rarely, and was abolished in 1943!

It would have seemed that the standard had been set, but this was not to be.

Olive Drab shade 41 was originally a mix of seven different pigments. When the war for the USA started, it soon turned out that that massive amounts of Olive Drab paint were going to be needed, and paint manufacturers began to look for ways to reduce the number of ingredients. Additionally, Cadmium was widely used as a paint stabilizer. However, cadmium was a scarce resource and the paint industry found itself in competition with the steel industry that required cadmium as a hardener for production of armour plate. The result was that cadmium was removed from paint mixes.

As a result, the wartime Olive Drab shade 41 might only have a couple of different pigments in it, the formulation varying between different paint manufacturers.

All this has resulted in paint that proved (*knowingly*) much less stable in field conditions. New aircraft, matching the specification colours at the door of the factory, could demonstrate quite dramatic changes of colour once deployed in the field.

Different batches of paints would fade at different rates to different base colour. For example, pilot of the 14th Fighter Group operating Lightnings in North Africa have reported that under the African sun, their early-model P-38s turned into bright purple!

Based on the analysis of the remains of crashed aircraft in the ETO, German researcher Has Ploes claims, that there were at least two variations of the Olive Drab paint. Originally both paints would have had almost the same shade, but one of the two paints weathered very quickly in a reddish shade. This paint was used by Douglas on A-20 Bostons and by Boeing on the B-17Gs. The other paint, much more steady and resilient to ageing, has been found on crashed P-47s and P-38s.

Further attempt at simplification on the part of officialdom came in March 1943, with the ANA 613 (*Equivalent to FS-34087*, which unified the Navy –Marines and Air Force Olive Drab to a single shade following the Army specification, which was lighter than Olive Drab 41.

Although officially affected by ANA directives, USAAF did not display much interest in this new paint. It would appear that they just chose to ignore the chips, and ordered paint manufacturers to continue to match the Dark Olive Drab 41 paint chips.

Thus Dark Olive Drab 41 was still being produced and used in production of camouflaged aircraft throughout the war, **and not the ANA-613/ FS-34087**. Confirmed by many sources, also by the U.S. Scale Contest Board of the AMA.

Quote; (*Many current documents quote FS-34087 as being Olive Drab, which in fact is. However it is not the Olive Drab that was used during WWII, That was Olive Drab shade 41, for which there is no matching current FS Number. FS-34087 is quite near, but Shade 41 is more reddish*).

The Color Olive Drab of the model paint industry;

There seems to be a consensus in the model paint industry about adopting FS 34087 as the correct shade for faded Olive Drab 41. However there is an original Paint Chip Shade no 41 ! (*I have one !!*).

Other reasonable matches for Olive Drab (*from dark, factory fresh finish to bleached and weathered*) could be in the range FS 34064 through 33070 to 34088.

This all is also the reason, that on RC Scale contests with my large 4m. B-17 in the Netherlands and abroad, I had to debate many times with the judges about the correct color of Olive Drab. But always got right on the basis of original Color Chip Olive Drab shade no 41, although I always had the Color Chip Olive Drab FS-34087 in my documentation, in case of that! Jan Hermkens

Oss,
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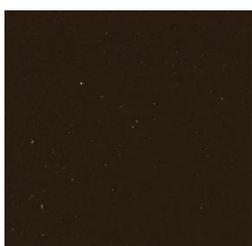
Contest results with my complete own construction Scale Models, for which I got always the highest points for the part Color.

- Winner of 40 International RC Scale Contests in; NL, D, P, CZ, A, CH, F, B, GB.
- 6x Europa Champion Stand-Off Scale (*Europa Star Cup*)(4x with 4m. B-17, 2x with 3,10m. P-61 Black Widow) + 1x Runner-Up (*with 3,45m Short Sunderland*).
- 9x Dutch Open Champion Stand-Off Scale + 2x Runner-Up.
- 1x German Open Champion Stand-Off Scale + 2x Runner-Up.
- 25 x National Champion, this in different classes (*F4C scale, Stand-Off Scale, Waterflying and F3A Aerobatic*).

Jan Hermkens
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Color Chips/ Kleurmonsters;

Here Copies, scanned from my and Original Color Chips.



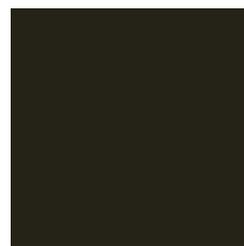
Olive Drab Shade 41



Olive Drab FS-34087
ANA-613



Leave Green FS-34079



Very Dark Drab FS-34064



Khaki Drab FS-44088