

Best Practices – Flex Additive

What, Where, and When

For years the use of elastomeric flex additives was recognized as an important component for the refinishing of plastic parts. When used as an additive in paint that was applied to flexible bumper covers and trim pieces they allowed the refinish paint to move with the part thereby preventing loss of adhesion or cracking. Today paint has been greatly improved in terms of flexibility and is incredibly durable compared to products previously available. But in many cases, current vehicle parts are more easily deformed due to the lighter and thinner part construction or the type of plastic than before. When refinished, these modern plastic parts require paint that is able to conform to the part as it flexes in normal driving or during a minor impact.

What

AkzoNobel has flex additives available for all our vehicle refinish brands. These include – Sikkens Elast-O-Actif or LV Elast-O-Actif; Lesonal Flex Additive; U-TECH LV Flex or Wanda Flex Additive for Plastics. Each of these products contains special polyester resins that become a permanent part of, and enhance the molecular structure of the paint they are used in. In addition, AkzoNobel flex additives contain additives that improve resistance to breakdown from ultraviolet sun rays that can cause paint to become brittle over time. The combination of the improved chemistry in these flex additives ensures the best possible resistance to adhesion loss or paint cracking on flexible parts throughout the life of the repaired vehicle.

Where

If a plastic part can be deformed by hand, it is considered flexible and the use of flex additive should be understood. Typically flex additive is used in AkzoNobel urethane primer surfacers, primer sealers and single-stage color and may be required in clearcoat.

Refer to the Technical Data Sheet (TDS) for the products you are using to determine the flex additive to be used and the amount required.

When

In the case of primer surfacers or sealers the use of flex additive is required if the part can be deformed by hand with moderate to medium force.

Flex additive is not typically required in AkzoNobel basecoat products but these basecoats may require the addition of a hardener to ensure inter-coat adhesion or flexibility on soft flexible plastic (foam) parts.

Many clearcoats offered by AkzoNobel do not require the addition of flex additive for parts that are considered flexible. However there are numerous clearcoats that do require additional flexibility and those can be determined by referencing the TDS for clearcoat(s) you use.

Refer to the Technical Data Sheet for the products you are using to determine the flex additive or hardener additive to be used and the amount required.