

Vehicle Restoration without using Metal Conditioner

With the recent deletion of the last remaining phosphoric acid based metal conditioner 5717S from Axalta's global refinish portfolio, it is important to understand the company's direction regarding mechanical preparation of bare metal versus the historic approach of using chemical treatments, particularly for restoration work.

The company's global guidance is to physically remove metal surface rust, using mechanical sanding or sandblasting techniques. This is the recommended method by Axalta for the removal of corrosion before priming. Once all surface corrosion has been removed, Axalta's restoration products and procedures, which include the use of 2K etching adhesion primers, will ensure subsequent metal surface passivation and rust prevention. This technique of physical removal of surface rust eliminates the risk posed by acid-based metal conditioner misuse.

The main types of **misuse** of acid-based metal conditioners include;

- Inadequate physical **corrosion removal** due to **unrealistic reliance** on metal conditioner use.
- Insufficient washing following application, leading to excess **residual acid** remaining on the metal surface.
- Failure to completely **remove and dry** all water from vehicle seams and joins following application.

The potential **consequences** of the misuse outlined above include;

- Continuation of the pre-existing corrosion leading to eventual **rust blisters** and bubbles in time.
- **Delamination of primer** when residual acid interferes with proper 2K primer cross linking, eg epoxy primers.
- **Moisture bubbles** and blisters after paint drying either soon after or later in time.

As mentioned above, Axalta recommends restoration procedures which outline the preparation and paint process steps required to ensure an optimal long-term corrosion performance of the restoration finish. These documented procedures are available on request.

Should you wish to discuss this matter further, please contact your local Axalta representative.

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