

DSS-Ch.04.01 | Chemical Attack / Etch / Reaction

Paint Remover / Solvent Bloom (matting / sheen loss)

Chemical - solvent exposure; optical matting or non-directional micro-texture within spill/wipe footprints

Diagnosis summary

Paint remover/solvent bloom is an appearance change caused by solvent-based strippers, thinners, or hot solvents contacting glass. Depending on chemistry, dwell, and heat, it presents as optical matting (sheen loss) and-in stronger cases-subtle non-directional micro-texture within a spill/wipe footprint. Classification is appearance-only per VIS (method-agnostic).

Field identification cues

- Surface-catch class (MSRT)
- SC-0 for optical-only matting (no relief).
- SC-1 (slight) where very shallow modeled micro-texture formed after strong or hot-solvent exposure. SC-2 is uncommon.
- Perform one light, non-marring pass; polymer stylus if a coating is suspected. MSRT supports classification only.

Classification, severity and scope

- Assign CAT by appearance + MSRT + morphology (three-part cueing). Depth/relief ranges are indicative-field measurement not required.
- CAT-1 (Benign / non-relief): Sheen/tone shift only, SC-0; visible at certain angles, minimal impact at standard view. Indicative relief: 0-10 μm (optical).
- CAT-2 (Light): Subtle modeled micro-texture, SC-1, confined to spill/wipe footprint; limited impact at standard view. Indicative relief: 10-40 μm .
- CAT-3 (Moderate): SC-1 to SC-2 matting legible at standard distance across broader footprint or multiple overlapping wipes. Indicative relief: 40-120 μm .
- CAT-4 (Severe): Pronounced matte field with obvious milky scatter at standard & wide-field views (rare for solvents alone; consider mixed chemistry). Indicative relief: 120-300 $\mu\text{m}+$.

Distinguishing criteria

- vs.
- vs. Residue films (R-family): Paint or adhesive overspray/films remove at reveal and read SC-0 on substrate; bloom persists as optical matting $\pm$ SC-1.
- vs. Mechanical abrasion (M.02.01 swirls): Abrasive swirls show directional arcs/tracks with edge sparkle and SC-1/SC-2 along paths; bloom lacks linear pathing and chip flanks.

Documentation and inspection

- Photo set (VIS): 12 / 36 / 72 in, normal + oblique, with raking macros resolving matting boundaries/overlap lines; add context frames (tools, cans, work zone).
- MSRT result: One light, non-marring pass on footprint interior; record SC-class (SC-0/1/2). Polymer stylus if coating is suspected.
- Forms: Pane ID; product family & surface numbering; worked surface Y/N; functional coating present on worked surface?

Safety / repairability boundary: Complete only the non-invasive reveal and inspection steps authorized by the controlling VIS guidance. Classification does not authorize restoration, establish acceptance, or override stop-work, coating, crack, integrity, access, chemical, fall-protection, or project-specific requirements.

Full DSS publication: use the catalog download. Web specification:

<https://a7df714357.nxcli.io/learning-center/resource-center/damage-specification-standards/dss-ch-04-01-paint-remover-solvent-bloom-matting-sheen-loss/>