

Testing for paint wetting impairment substances



Proof of LABS-conformity

Paint wetting disturbances are defects in the complete and even wetting of a surface with paint. In this context, substances found to impair the even wetting of a surface with paint during LABS testing (e.g. through the formation of craters) are defined as paint wetting impairment substances (German: lackbenetzungsstörende Substanzen, abbreviated LABS).

LABS testing according to VDMA 24364

The VDMA specification describes the procedure for testing products for the presence of paint wetting impairment substances, their classification and marking as well as the qualification of products regarding their LABS-conformity for the application of liquid paint.

What does “LABS-free” mean?

The claim “LABS-free” cannot be made on the basis of a test. Materials or products can, however, be LABS-compliant, depending on the nature or area of their application.

LABS-conformity

LABS-conformity describes the condition of a product or material, the testing of which according to VDMA specification 24364 did not cause any paint wetting disturbance.

LABS-conformity can be determined for specific applications using defined testing methods.

Zone classification for testing the LABS relevance

VDMA specification 24364 classifies companies using and applying paint into different zones, whereby a zone defines areas of the same LABS relevance. The central questions in all of this are:

Where in a painting company is a product used?

What products come into contact with paint, solvents or the surfaces to be painted?

Zone I / LABS relevance “High”:

All areas of pre-treatment, paint application and drying, as well as surfaces exposed to media (e.g. paint supply, compressed air supply)

Zone II / LABS relevance “Moderate”:

This is the zone within the production area using paint, but not included in zone I

Zone III / LABS relevance “None”:

This zone is within the company, but outside of the painting production area

Depending on the defined zone for the intended area of application of the product, varying levels of severity are required in the inspection to limit or exclude contamination with paint wetting impairment substances in these areas.

Product groups and test classes

The product group is selected on the basis of the intended use of the product and the zone classification. It establishes the application reference for the LABS test and thus sets the basis for the selection of the test class. In this, a distinction is made according to Table 2 (see VDMA 24364:2018-05) between the product groups A, B, C, S and T.

The selection of the test class depends on the product group and is decided according to the intended use of the product.

A combination of different test classes is possible.

Testing for paint wetting impairment substances

LABS test in the laboratory

Sample extraction in the laboratory test can be carried out in several different procedures:

- > Rinsing off at the surface or hollow areas
- > Rubbing of the specimen – dry rubbing off or with solvent
- > Blowing off the specimen with oil-free compressed air
- > Immersing the specimen for 24 hours
- > Direct application of a material (paste, powder, liquid) onto the test plate
- > Outgassing the specimen at a defined temperature and covering with the test plate for one hour

A product is considered as having passed the test under the selected conditions and may be marked as LABS-compliant if the painted test plate does not show any wetting disturbances when the paint is dry. The marking of LABS-conformity according to the VDMA specification 24364 must always include the test class and the paint used (solvent and/or water-based).

As an accredited laboratory, we will be happy to support you in preparing the test plan! Simply contact us.

Notes on taking and sending test samples:

- > Please pack test samples individually / separately (avoid cross-contamination)
- > Please ensure that no additional contamination of the test sample occurs during collection and packaging (e.g. by lubricants, grease, hand cream, cosmetics)

DEKRA Automobil GmbH

Laboratory for Environmental
and Product Analysis

Sample receipt

Handwerkstrasse 17

70565 Stuttgart

Germany

Phone +49.711.7861-4160

testlab@dekra.com

www.dekra.de/labor



On the safe side.