

DETECT HEALTH RISKS IN THE WORKPLACE IN ADVANCE.

TASK

Even the slightest contamination of the air we breathe with hazardous vapors, gases or dusts can endanger the health of employees in the long term. To ensure safe working conditions, the legislator has issued occupational exposure limit values (OELs) for hazardous substances. Employers and plant operators must ensure compliance with these limits by means of workplace measurements or other suitable methods.

SOLUTION

The bubble was opened at Analytik Service Obernbuurg. The polymer surface below the bubble appears darker than in the freshly removed reference area (red arrow in Fig. 2). In the bubble area, hardly any polymer adheres to the metal, while the adhesion in the reference area is so high that part of the polymer was torn off when the metal layer was peeled off - the underside of the metal is covered by numerous polymer flags (Fig. 3). In a further step, the polymer in the reference area was chemically dissolved away and the metal underside exposed (Figs. 4 and 5), revealing a cavern structure of varying degrees of intensity.

Industries

Automotive suppliers
Chemicals
Chemical fibers
Paints and varnishes
Plastics processors

Analysis objectives

Quantification of hazardous substances
Risk assessment

Materials

Indoor Air

Analysis methods

Gas chromatography
Ion chromatography
Spectroscopy
Gravimetry

Supplementary methods

IR spectroscopy

Related questions

Emission measurements
Volume flow measurements



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ADVANTAGES

The working group involved in these measurement tasks consists of experienced environmental engineers. Regular further training and successful participation in official round robin tests underpin their expertise. Access to additional, well-equipped laboratories at Analytik Service Obernburg (almost fully accredited to DIN ISO IEC 17025) enables a wide analytical range - particularly important for difficult problems. Typical and frequently occurring pollutants such as solvents, aldehydes, aerosols, dusts including welding fumes and diesel engine emissions can be determined without any problems. If a measurement task goes beyond the standard measurement technology available at Analytik Service Obernburg, additional measurement options are available through contact with external, accredited institutions. In such cases, an external evaluation is commissioned after professional sampling by Analytik Service Obernburg.

If you are planning or already carrying out a work process in which hazardous substances are used or may arise, your mandatory risk assessment must also document compliance with the workplace limit values. Analytik Service Obernburg can provide you with support in determining the data using measurement technology as well as qualified advice. If necessary, advice on safety-related or legal aspects can also be provided by our safety department, which has its own in-house lawyer.

