

MS imaging of an industrial material using blotting method

MS imaging is also effective in analyzing industrial materials. For example, it can be used in quality inspections to analyze stains or foreign materials on a product after manufacturing or processing. However, some materials may be difficult to place into a mass spectrometer because they cannot be cut into thin slices or very small sizes. In this paper, the DIUTHAME blotting method was used to perform MS imaging of stains on a glass surface.

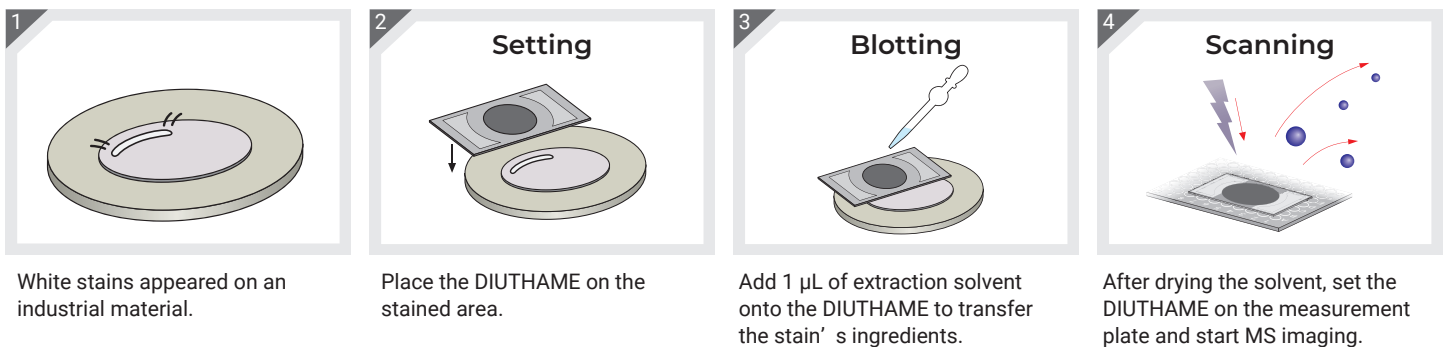


▲ A13331-18-2B (For blotting)

Measurement conditions

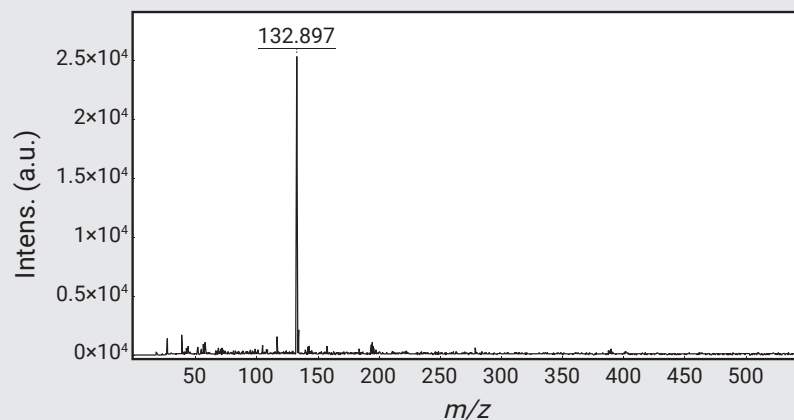
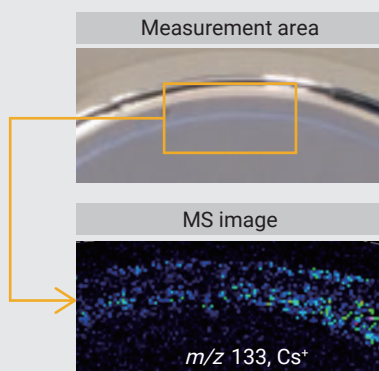
Measurement mode: Laser pitch 50 μm
 Positive ion, reflectron mode
 Sample: Glass (ϕ 50 mm X 15 mm thick)
 Extraction solvent: HCl, 1M : Acetonitrile = 1 : 1

Method



Results

The MS imaging results are shown below. Using the DIUTHAME blotting method, the white stain's ingredient was identified. These results suggest that the combination of solvent extraction and DIUTHAME blotting can be used for surface analysis of industrial materials.



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