

Thermal desorption and pyrolysis device for DART®-MS

ionRocket

Material
&
Chemical
industry



Food
&
Beverage



Cosmetics

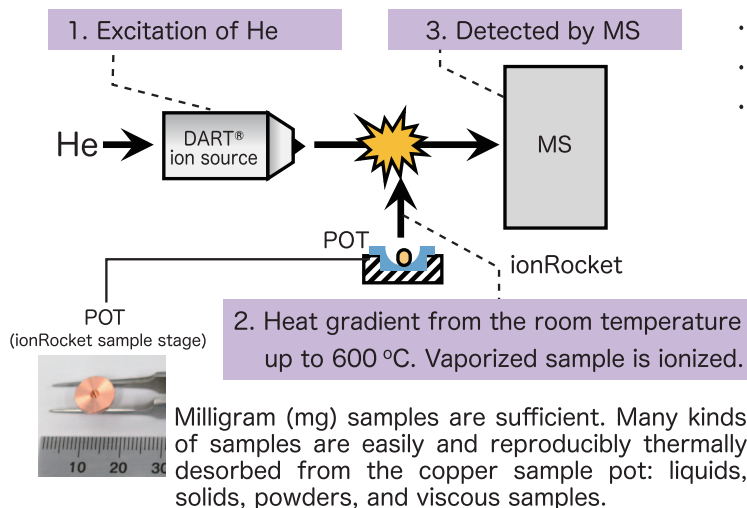


Forensic
science



ionRocket DART®-MS system

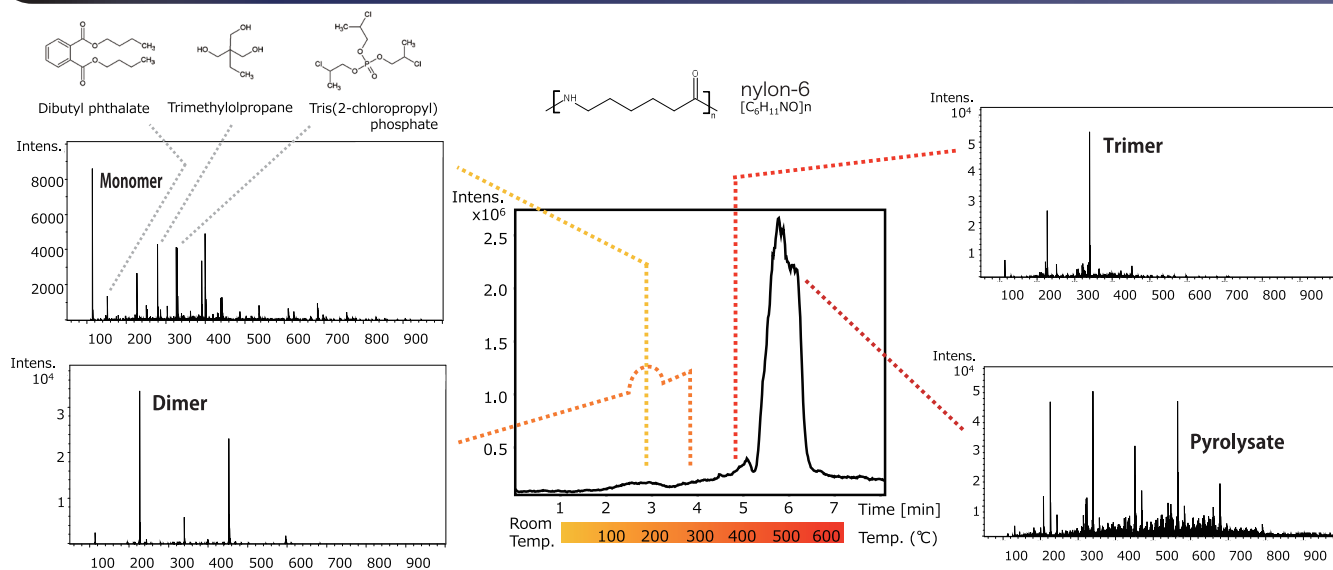
The merits of ionRocket DART®-MS



- No derivatization, extraction, or other sample preparation required.
- Thermal extraction and pyrolysis at one assay.
- Thermal gradients enable easy separation and rapid compound identification.

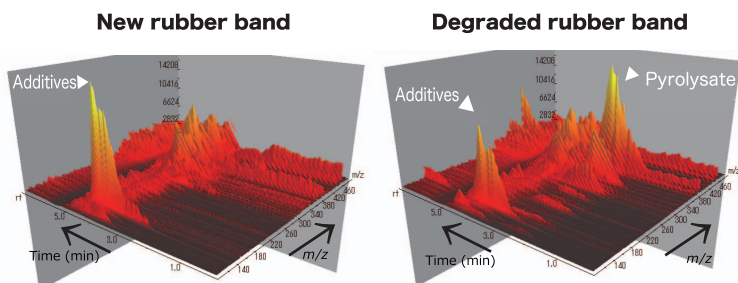


The analysis of nylon-6



Nylon-6, commercial item, were analyzed by ionRocket DART®-MS. Sample was sliced into 0.5 mm x 0.5 mm sections, and then placed in the POT, ionRocket copper sample pot. A temperature gradient of 100 °C/min. from room temperature to 600 °C was applied. At the 200 °C, monomer and additives were measured. Dimer and trimer were detected at 300 °C and 400 °C, respectively. Over 500 °C, the pyrolysate were detected.

Analysis of degraded natural rubber



A rubber band, commercial item, was analyzed by ionRocket DART®-MS. Sample was sliced into 0.5 mm x 0.5 mm sections, and then placed in the POT, ionRocket copper sample pot. A temperature gradient of 100 °C/min. from room temperature to 600 °C was applied. The results show clear differences between a new rubber band and one degraded by a heat treatment, with different relative peak heights for additives and degradation products.



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