



# Curie Point Injector JCI-22

## Adhesive and Tackifire

### Point

- 2 kinds of Tape Adhesive base polymer identifications by portable pyrolyzer
- To detect Tackifire (rosin ester) by eliminating base polymer with a simple preparation

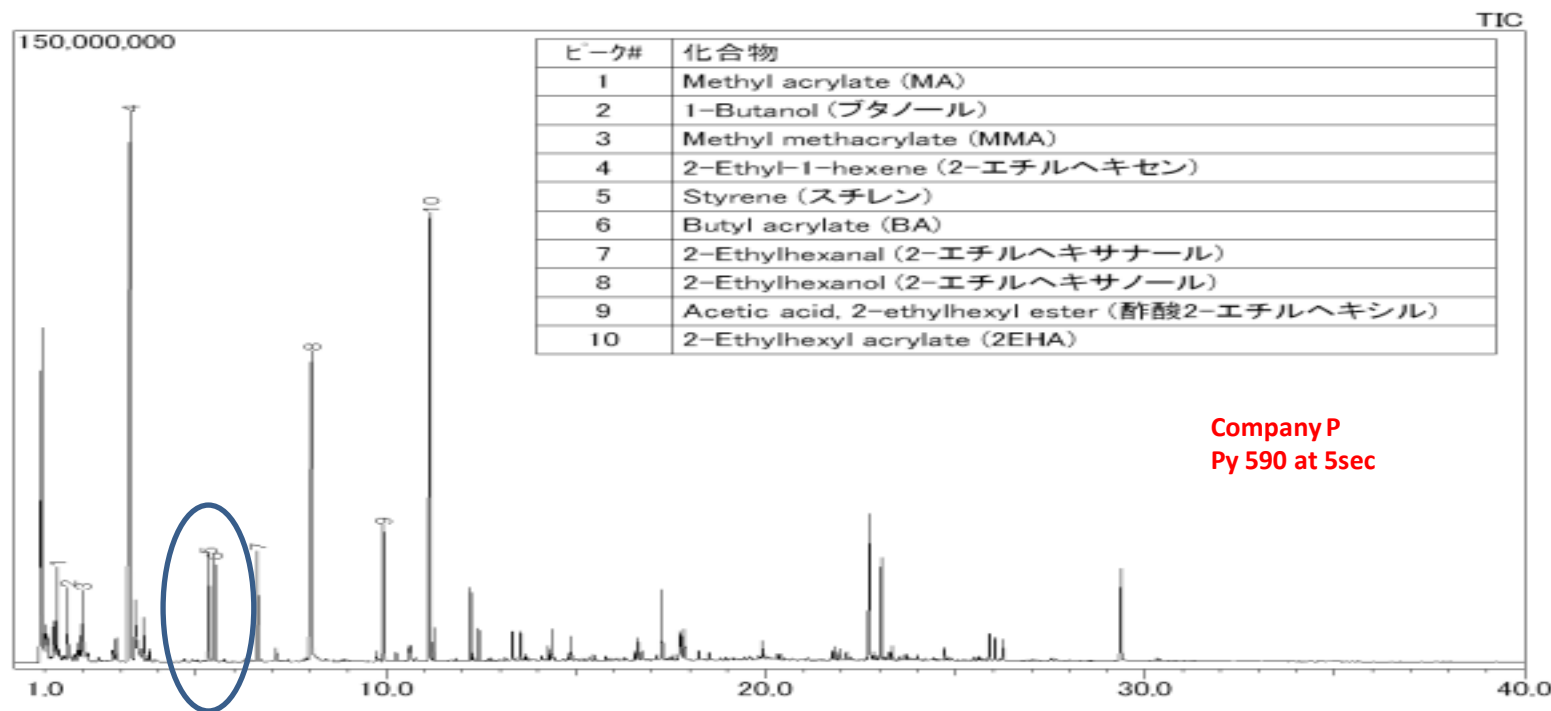
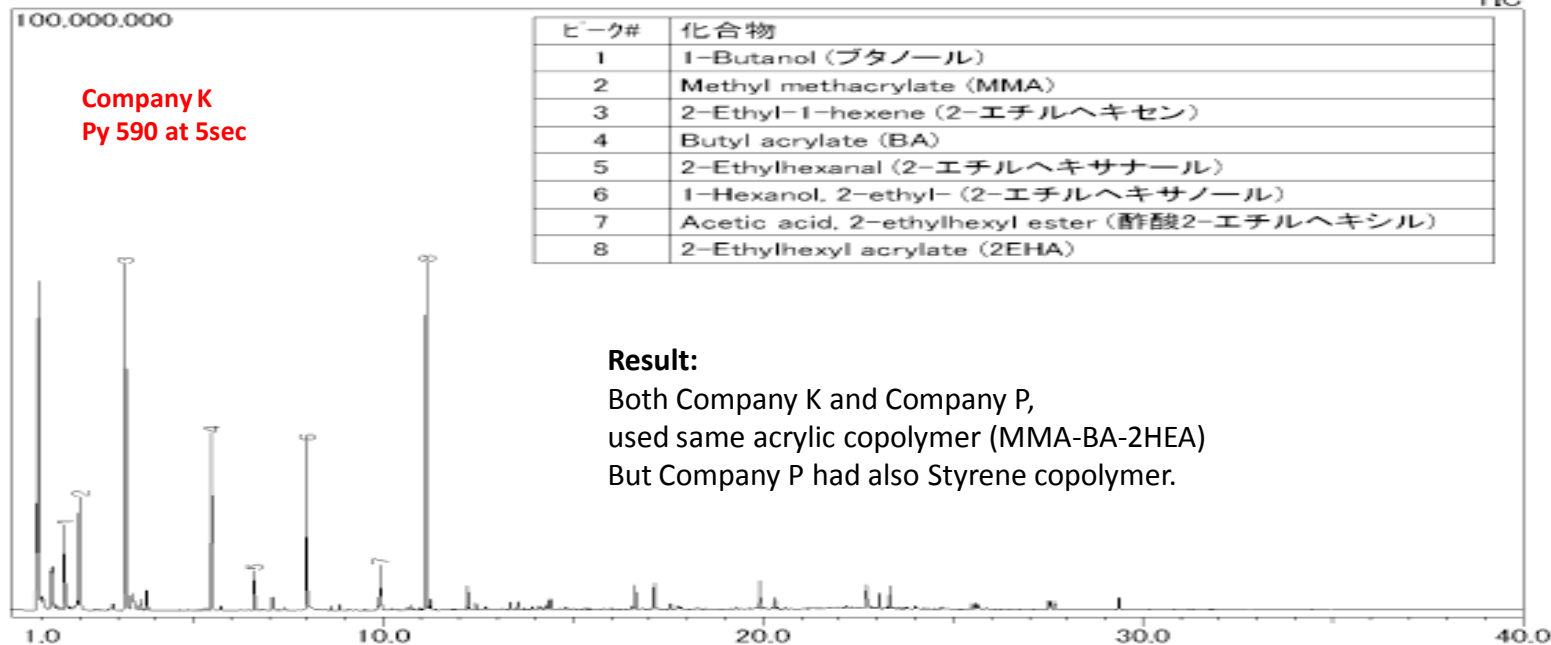
**Sample:**

Three different companies Tape Adhesives 0.5mg each



JCI-22  
JAS-15M II

Japan Analytical Industry Co., Ltd



# Tackifier in Adhesive

## Background

Tape adhesive base polymer has weak stickiness itself. Generally tackifier is added and as tackifier, rosin ester is commonly used.

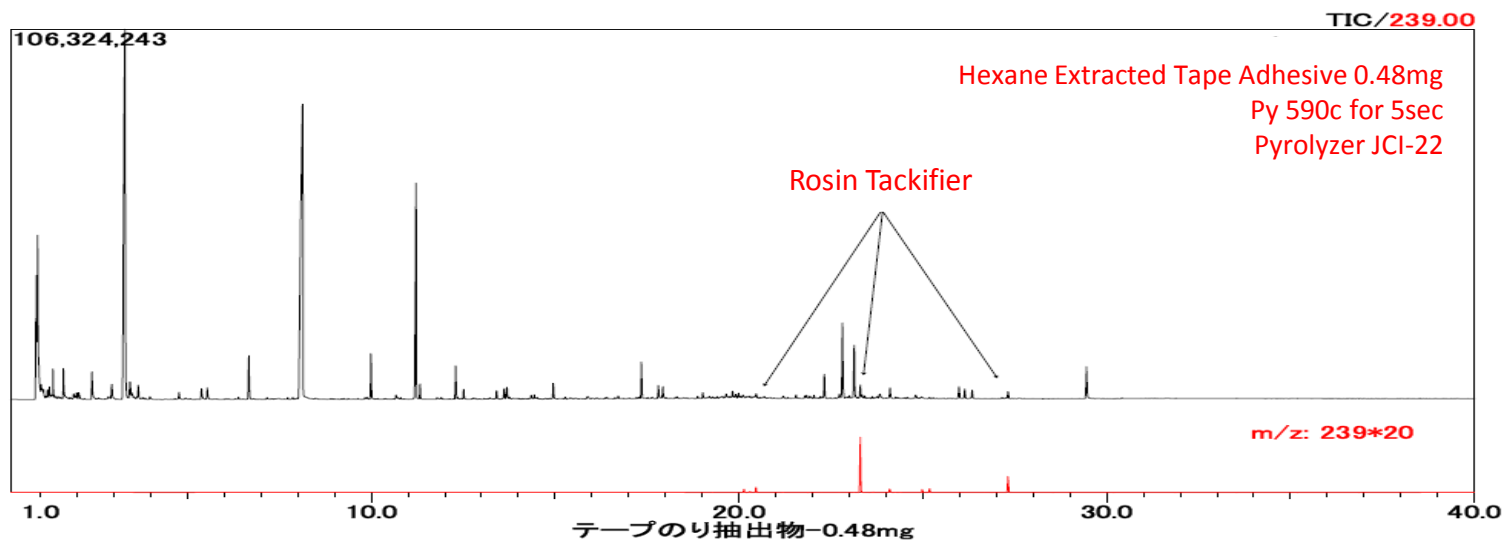
Put the tape adhesive sample directly to Py-GC/MS, there are many thermally decomposed peaks were detected from base polymer and this made it difficult to detect peaks from rosin ester.

## Simple Preparation

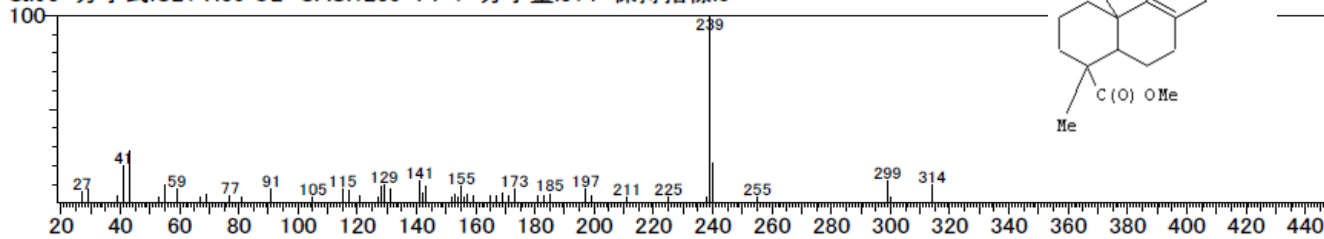
Soak a piece of tape adhesive into Hexane solvent 50mL overnight to extract. Take only the surface area of the solvent and drop 20mL of methanol to eliminate polymer and evaporate. Pyrolysis only with remained solid.

## Result

Rosin tackifier (main compound is Dehydroabietic acid, methyl este MW314) was detected. Also, it is reported applying Reaction Py-GC method using methylating agent, shaper peaks of Dehydroabietic acid, methyl este can be obtained.



ヒット#:1 エントリ#:98246 ライブラリ:WILEY139.LIB  
SI:93 分子式:C21 H30 O2 CAS:1235-74-1 分子量:314 保持指標:0



Dehydroabietic acid, methyl este (Rosin Tackifier)