

NEW F-Search system Ver. 3.7

“F-Search” is a mass spectral search software system that helps identify polymers and additives based on EGA thermogram and pyrogram data

Features of F-Search system Ver. 3.7

1) Search software and four libraries

Libraries can be selected for your specific needs. The reliability of analysis results is greatly improved by evaluating data obtained by different techniques.

2) Search is made by unique algorithm independent of analytical conditions

Using proprietary search algorithm*, the search results are not influenced by factors such as analytical conditions and types of separation columns.

* Japanese patent 3801355, US patent 6444979

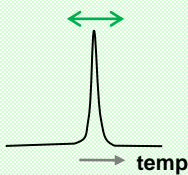
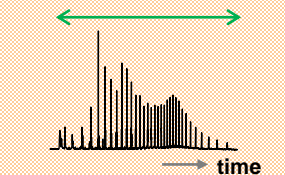
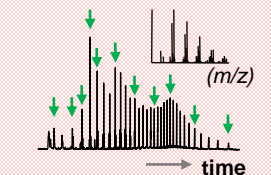
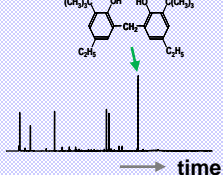
3) More polymers stored in libraries **NEW**

Compared to previous version, 315 polymers, pyrolyzates for 165 polymers obtained using wax-based separation column, and 96 more additives such as vulcanization accelerators for rubber have been newly added.



F-Search and libraries with version 3.2 or later can be upgraded to the latest version.

Specifications

F-Search “All-In-One” (Ver. 3.7) (Includes search engine F-Search Ver. 3.7 and all four libraries)	EGA library NEW 	PyGC-MS library NEW 	Pyrolyzate library NEW 	Additive library NEW 
Analytical technique (MS)	Evolved gas analysis (EGA)-MS	Pyrolysis-GC/MS (Py-GC/MS) and Thermally assisted hydrolysis and methylation-GC/MS (THM-GC/MS)		Pyrolysis-GC/MS (Py-GC/MS) and thermal desorption-GC/MS (TD-GC/MS)
Number of polymers/additives	1,315 polymers	1,315 polymers (THM data in 33 polymers)	268 polymers *1 (THM data in 33 polymers) 165 (out of 268 polymers) *2	590 additives
Stored chromatogram	Thermogram	Pyrogram/chromatogram		
Number of mass spectra	c.a. 2,400	c.a. 3,700	c.a. 8,900	c.a. 5,800
Compatible GC/MS	Compatible with all major GC/MS systems. Data formats used in Agilent (MassHunter, Chemstation), Shimadzu, and JEOL (AutoMass, GCMate, K9, Q1500) can directly be read. Thermo, Varian, Perkin Elmer, and LECO require conversion to AIA format.			
PC system required	OS : Windows 11, 10, 8.1 (64 bit or 32 bit), minimum hard disk space : 250MB			

*1 Data obtained by 5 % phenyl 95 % dimethylpolysiloxane-based separation columns

*2 Data obtained by polyethylene glycol-based separation column