

# **Pyrotec Pyrolyzer System**

Fluorochlorocarbons (CFC) have been linked to ozone depletion in the upper atmosphere, yet they have been used in a wide assortment of industries because of excellent properties such as incombustibility, chemical stability, and insulation capability. Conventionally, measurements of these gases have required expensive equipment and skilled specialists. The Gastec Pyrotec System has made this monitoring easy and economical by combining detector tube technology and a portable pyrolyzer.



#### **Features**

- Fast, accurate, and easy measurements on the spot
- A variety of applications including measurements at the gas generating sources to confirm gas concentrations or at workplaces to detect gas leakage.

# Pyrotec System configuration

Components	Quantity	Remarks
No.840 Pyrotec (Photo 1)	1	Portable pyrolyzer
Pyrotubes (Photo 2)	5	10 tubes are packaged in a box
Pretreatment tubes (Photo 3)	5	Five kinds of Pyrotubes are available.
		(Nos. 51H, 51 , 51L, *52, 53)
Model GV-100.	1	Optional. Available as the Model GV-100S
Gas Sampling Pump (Photo 4)		Gas Sampling Pump Kit.
Instruction sheet	1	

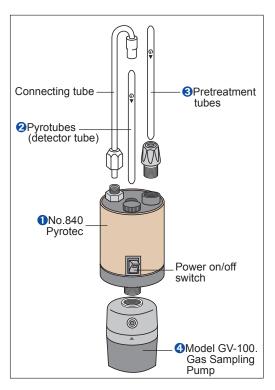
\* Pretreatment tubes are not included

### Measurement principle

When the handle of the Gas Sampling Pump is pulled, fluorochlorocarbons or halogenated hydrocarbons in the sample will first pass through the pretreatment tube where interfering organic vapours are removed and then enter into the Pyrotec where they are thermally decomposed into substances that can be easily measured by the Pyrotube, and finally enter into the Pyrotube where the by-products of the pyrolysis react chemically with the reagent.

## ■No.840 Pyrotec specifications

Battery life	Approx. 2 hours (for continuous use)		
Filament life	For 1000 measurements in case of		
	trichlorotrifluoroethane (R113) (6000 ppm)		
Warm-up time	2 minutes		
Ambient temperature	0 to 40° C (32 to 104°F)		
Power supply	AA size battery × 4		
Dimensions: diameter × length	68mm × 150mm (2.6 in × 5.9 in)		
Weight (including 4 butteries)	245g (0.5 lb)		



Pyrotec pyrolyzer:	Table of m	neasurable	(Target)	gases
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Name of target gas	Tube No.	Measuring range (ppm)	Scale range (ppm)	Shelf life (years)	TWA (ppm)	
Acetonitrile	52*	3~180		3	20	
Methyl chloride	51*	12~480		3	50	
	51L*	1.6~86		3		
Methylene chloride	51L*	1~54		3	50	
Nitro ethane	52*	4~240		3	100	
1-Nitropropane	52*	4.2~252		3	25	
2-Nitropropane	52*	3.7~222		3	10	
Nitromethane	52*	5~300		3	20	
Dimethyl Disulphide	53*	0.3~6		2	0.5	
Fluorocarbon 11	51H*	275~6600		3	C1000	
	51*	8~320		3		
	51L*	0.8~43		3		
Fluorocarbon 12	51H*	325~7800		3	1000	
	51*	11~440		3		
	51L*	1.8~97		3		
Fluorocarbon 22	51H*	1000~24000		3	1000	
	51*	25~1000		3		
	51L*	2.5~135		3		
Fluorocarbon 112	51H*	125~3000		3	50	
	51*	7~280		3		
	51L*	1~54		3		
Fluorocarbon 113	51H	250~6000	250~2000	3	1000	
	51	10~400	10~400	3		
	51L	1~54	1~20	3		
Fluorocarbon 113a	51H*	125~4800		3		
	51*	10~400		3		
	51L*	0.8~43		3		
Fluorocarbon 114	51H*	475~11400		3	1000	
	51*	20~800		3		
	51L*	1.8~97		3		
Fluorocarbon 123	51*	14~560		3	-	
	51L*	1.4~28		3		
Fluorocarbon 141b	51*	10~400		3	-	
		1.1~22		3		
	51L*	1.1 22				
Fluorocarbon 225	51L* 51*	20~800		3	-	
Fluorocarbon 225 (Fluorocarbon 225Ca + Fluorocarbon 225Cb 1:1)				3	-	

\*:Use conversion factor

For all types of gas and vapour SINCE 1970



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