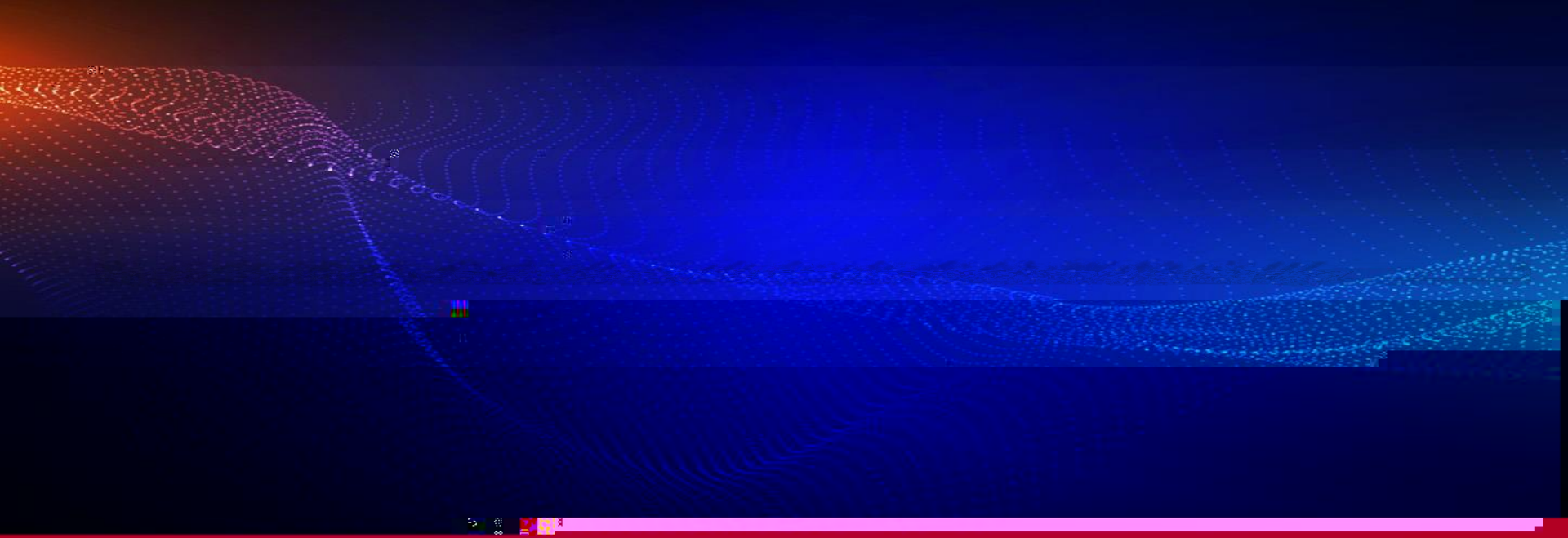

青岛盛瀚色谱技术有限公司
Jiao ShengHan Chromatograph Technology Co.,LTD: : Qingc
ningpeng@qdsrd.com

应用行业

/ / / / /
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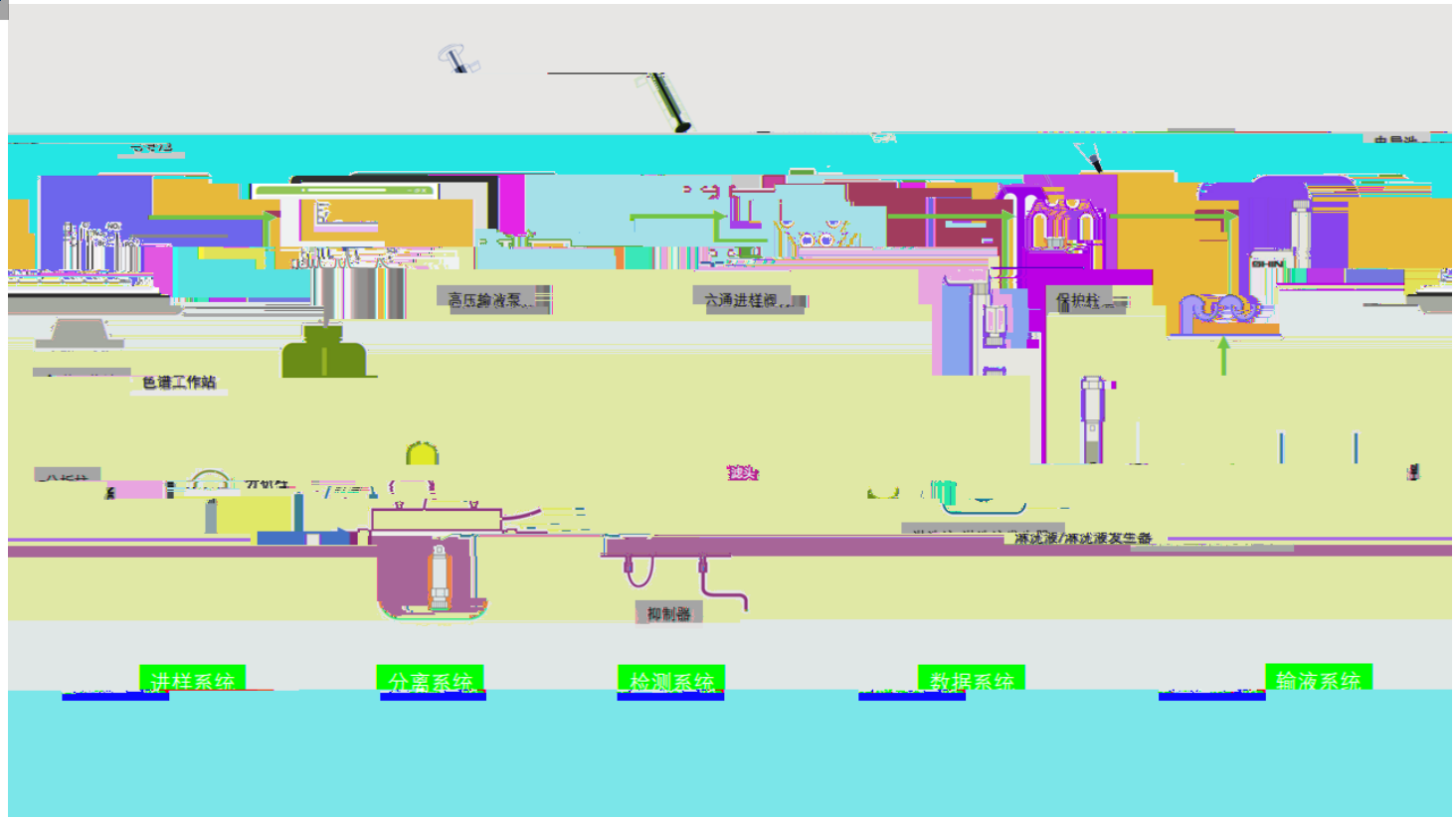
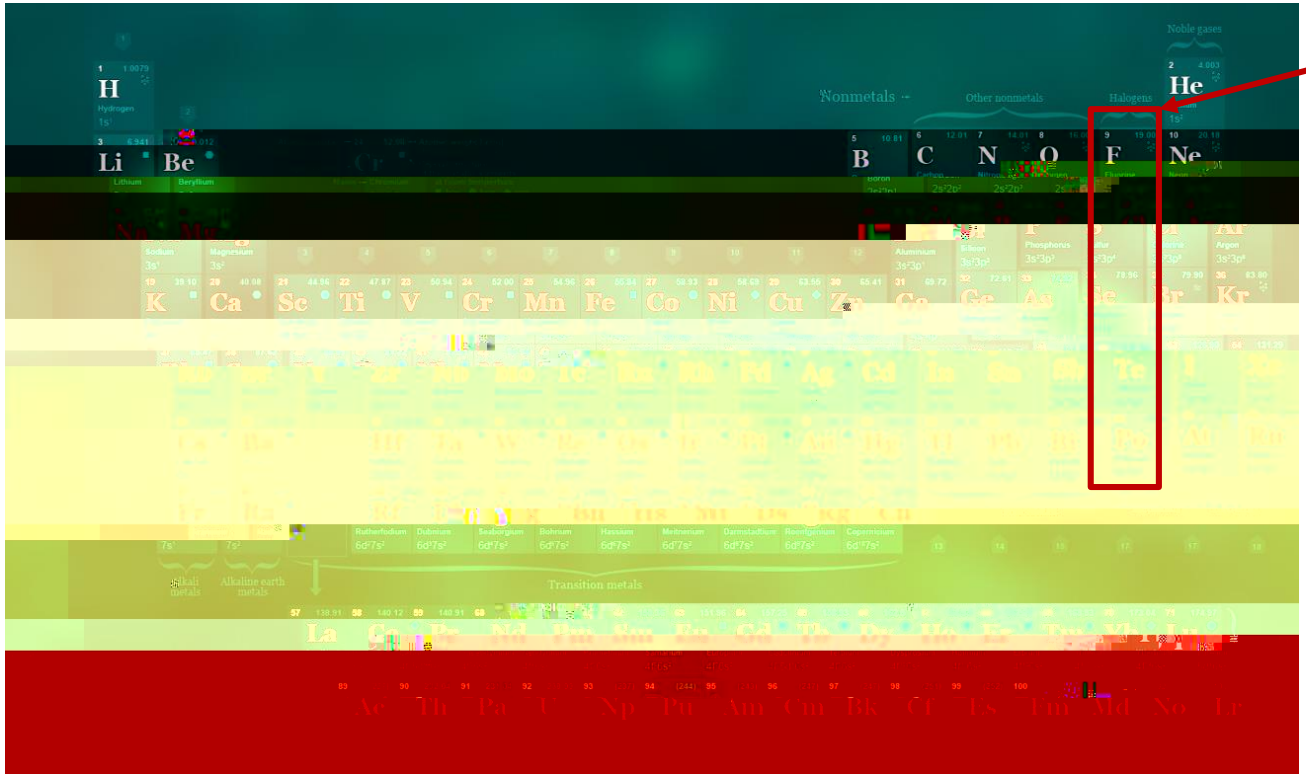

高压输液泵
六通进样阀
保护柱
色谱工作站
抑制器
进样系统
分离系统
检测系统
数据系统
输液系统



Halogen

VII

F

Cl

Br

I

At

F Cl Br .

z PCB

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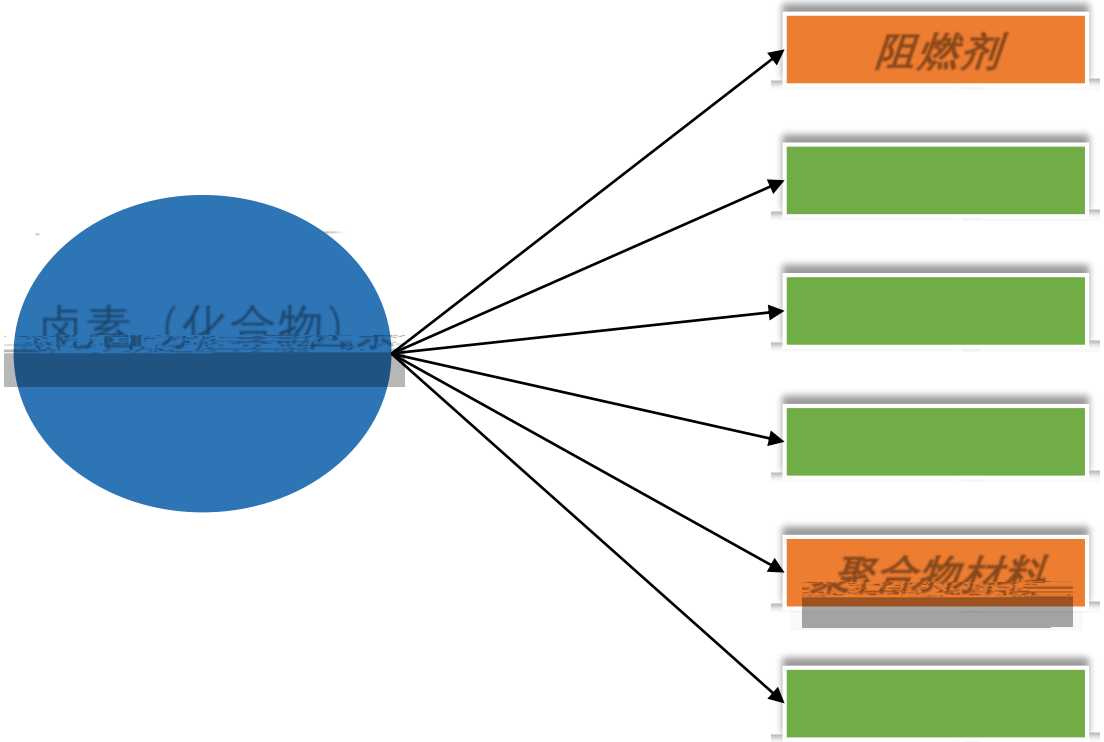
典型应用



	PBB PBDE TBBPA A		

Polyvinyl Chloride PVC

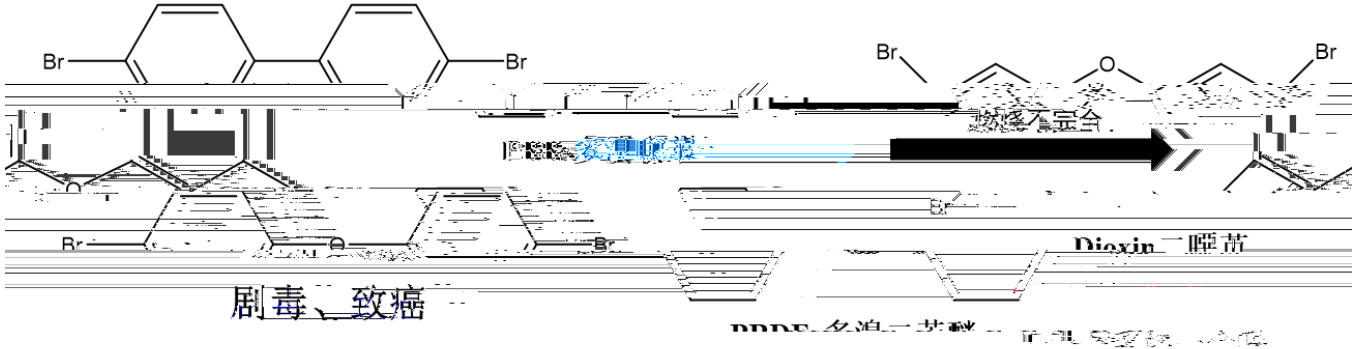
PVC

—

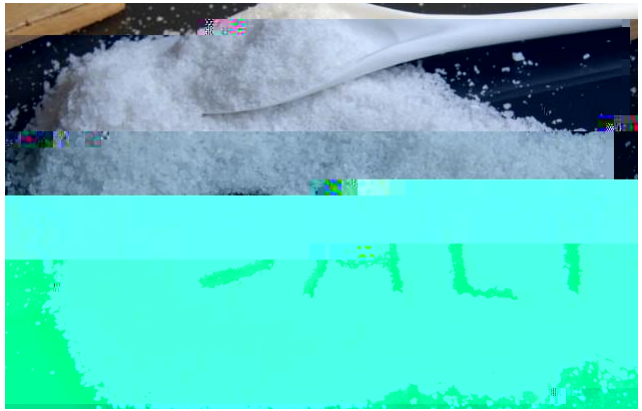
—

—

卤素主要危害



130 900



NaCl

EN European Norm 61249-2-21:2003

IEC International Electrotechnical Commission 61249-2-21:2003

Cl ≤900ppm Br ≤ 900ppm Br Cl ≤ 1500ppm

“ ”

4

RoHS

0.1%

3 (Halons)

(HCB)

(PCBs) (PCDDs) (PCDFs)

IEC 61249-2-21 2003 ≤900ppm

≤900ppm Br Cl ≤1500ppm

REACH

Reach SVHC

4 3

C10-13

(2-)

“中国RoHS法规”

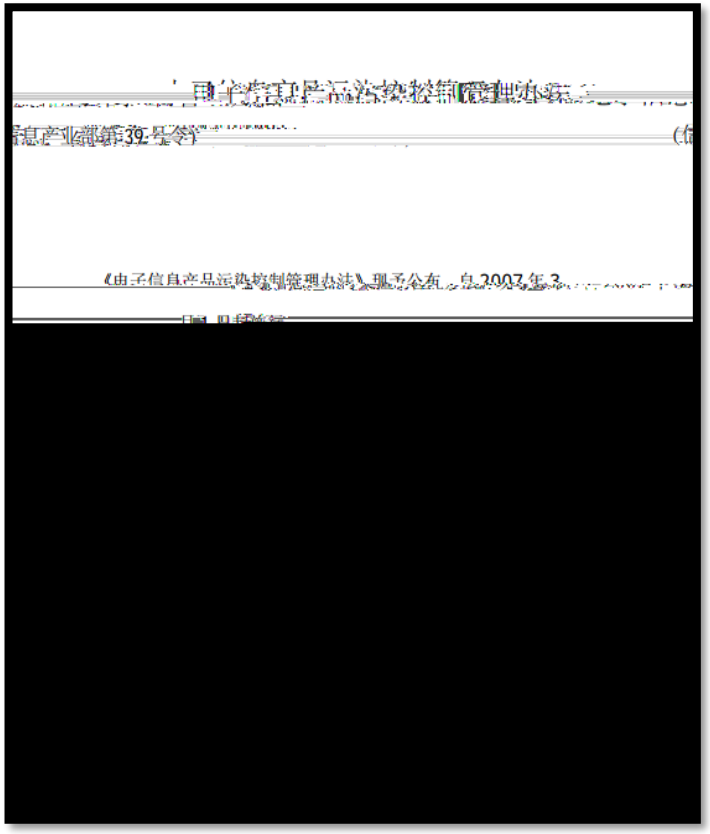
2002

7

2006 2 28

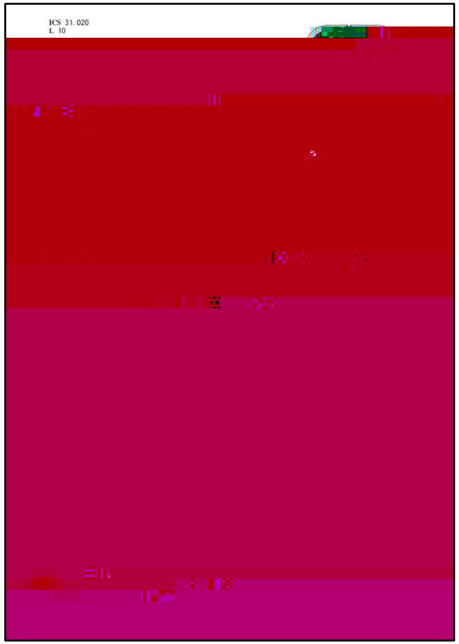
“ **RoHS**

”



二国家标准

GB 26572-2011

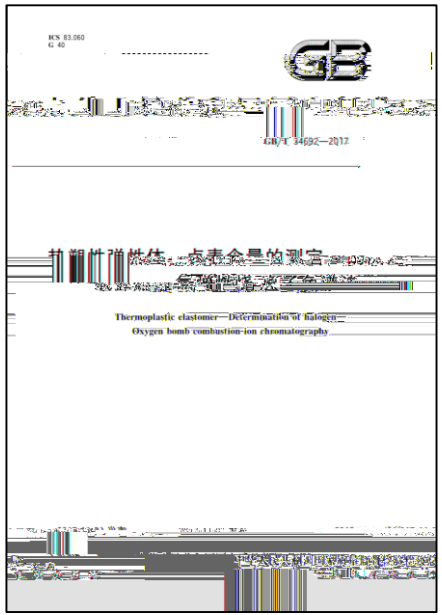


Pb

Hg Cr^{6+} PBBs

PEDEs 0.1%

0.01%



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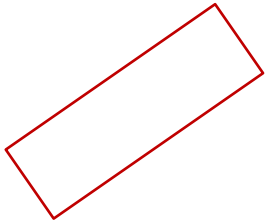
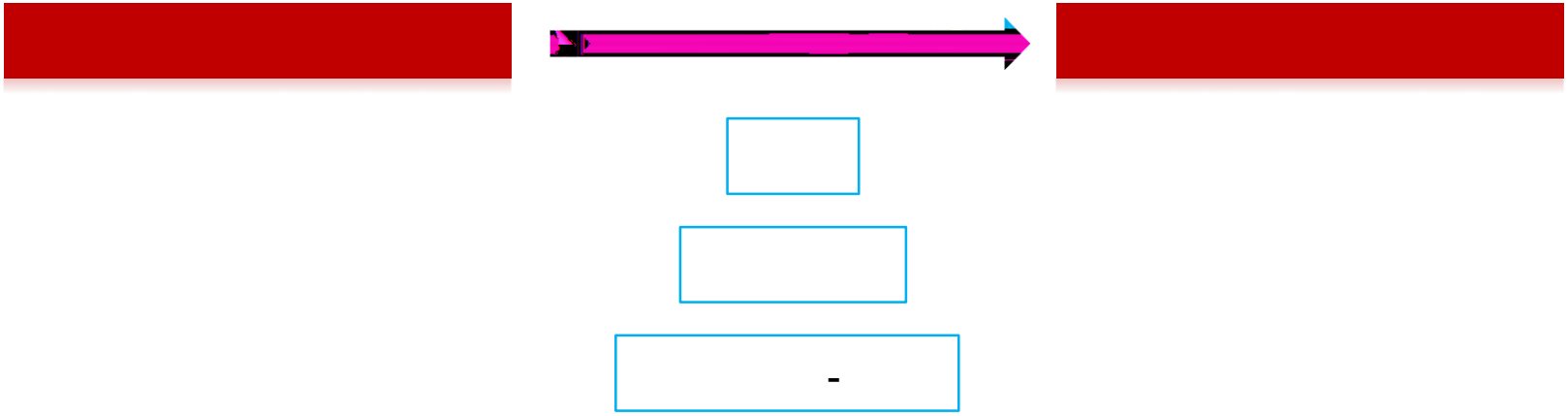


前处理方式



前处理技术

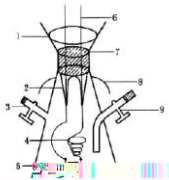
1、氢弹/氧瓶燃烧

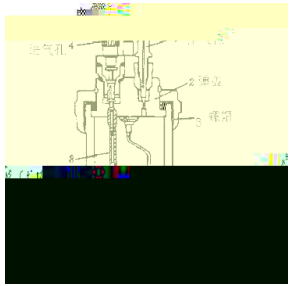
2、氢合/管式炉燃烧

3、高温水裂解

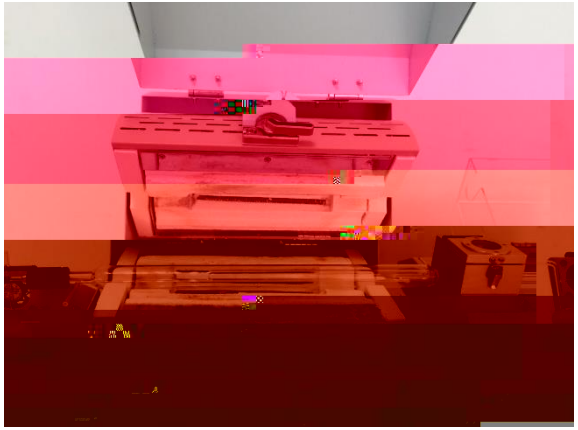
1、氧弹/氧瓶燃烧

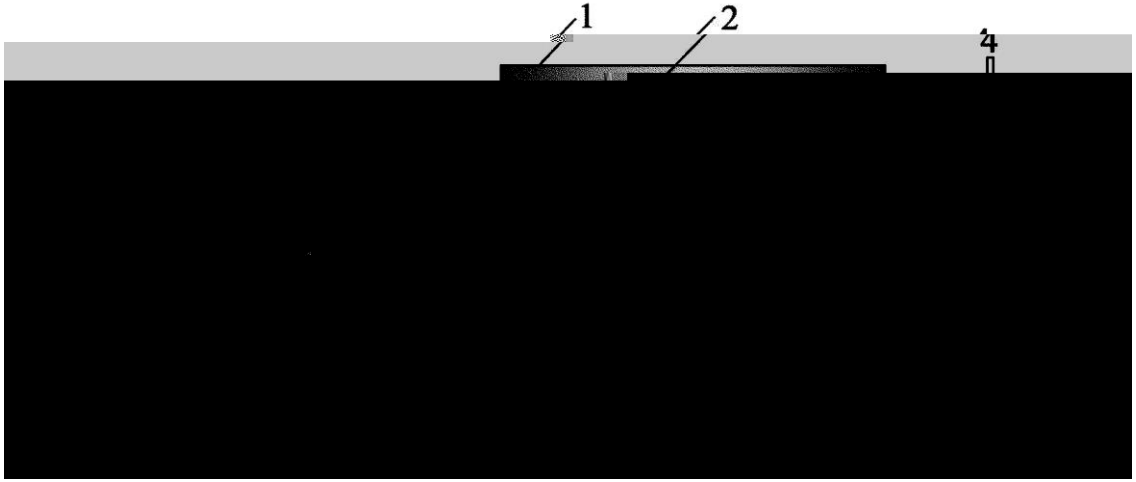
50mg



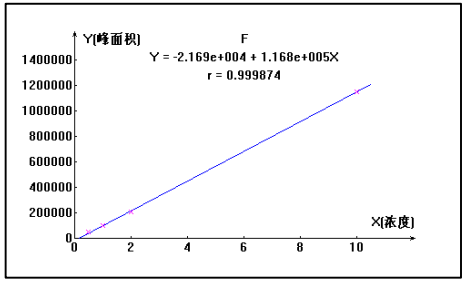


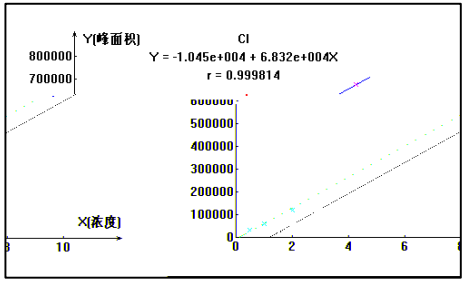
2、氧合/管式炉燃烧

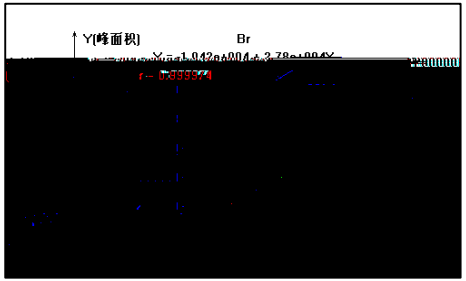




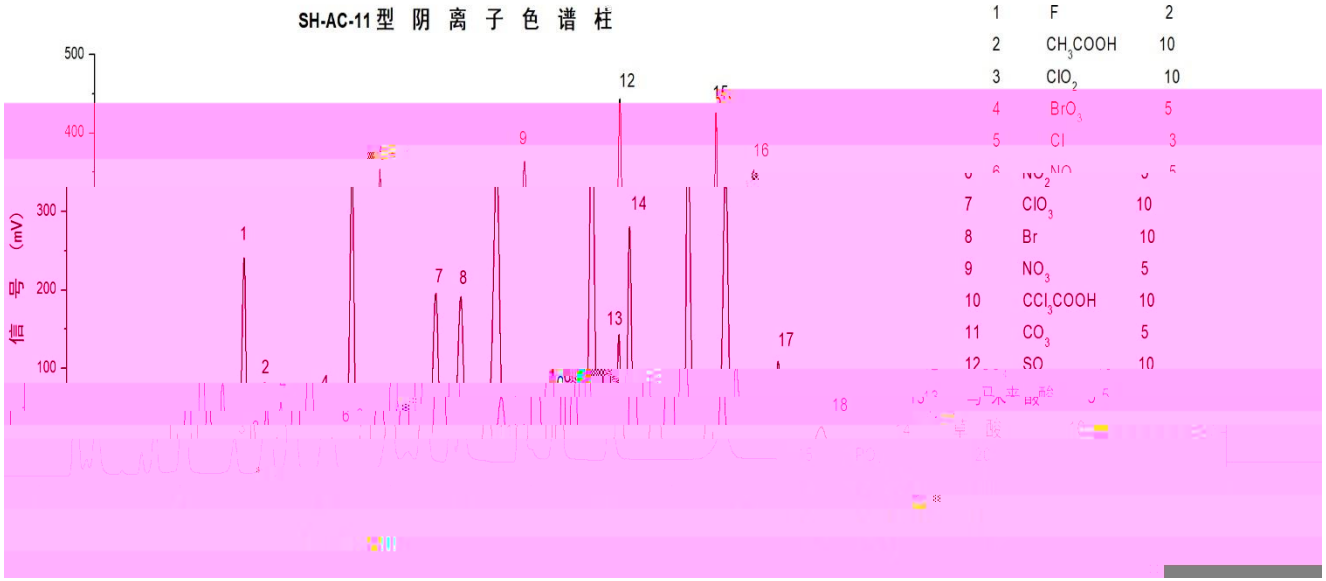
		CIC-D120	μL	25
		SH-AC-4/SH-AC-9		SHY-A-6
		2.4mmolNa_2CO_3+6.0$NaHCO_3$	mL/min	1.5
	( )	35	( )	35



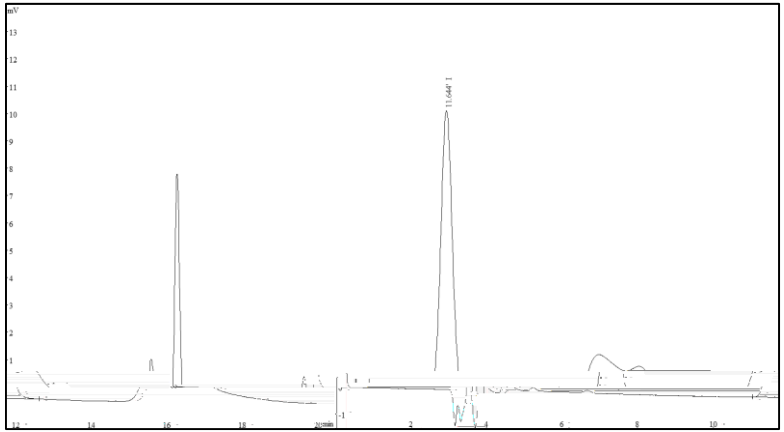




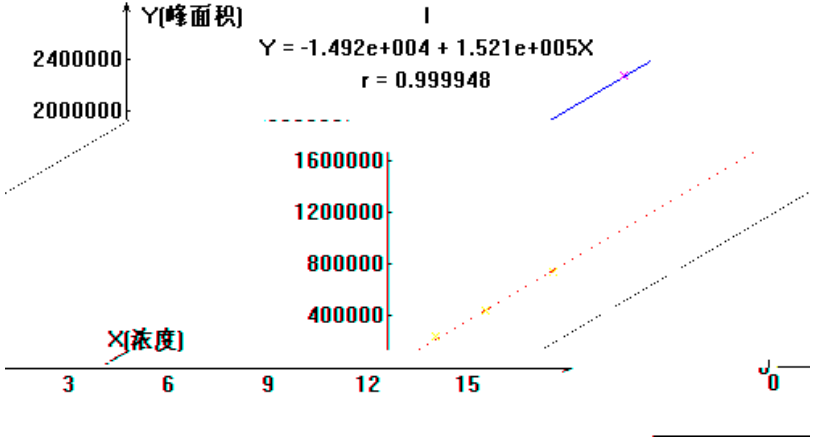
140
120
1
1 F
2 Br
3 Cl
4 NO_2
3
5


SH-AC-11型 阴 离 子 色 谱 柱
信号（mV）
500
400
300
200
100
1 F 2
2 CH3COOH 10
3 ClO2 10
4 BrO3 5
5 Cl 3
7 ClO3 10
8 Br 10
9 NO3 5
10 CCl3COOH 10
11 CO3 5
12 SO 10

碘离子专用柱

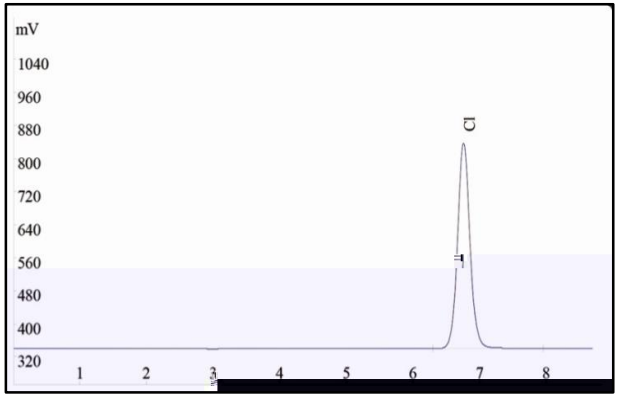


CIC-D160
25μL
2
1.5mL/min
30
35
75mA
6.0mM KOH
SH-AC-17



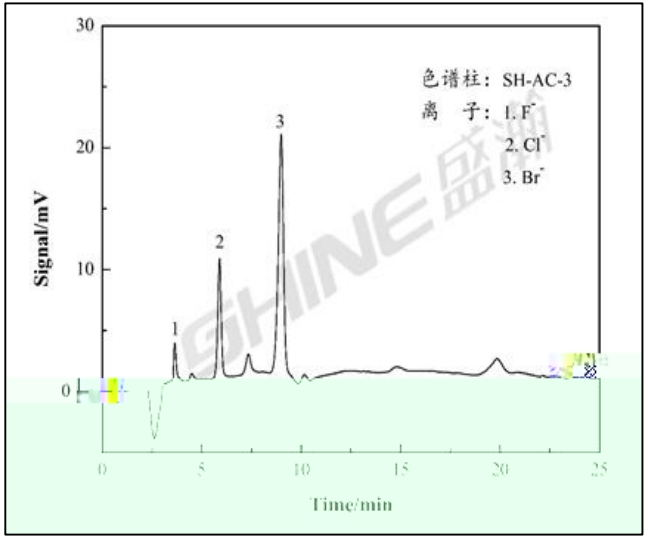
	/ppm			3	/ppb
I^-	1.5-15.0	Y=-1.492e+004+1.521e+005X	0.999948	3.37	

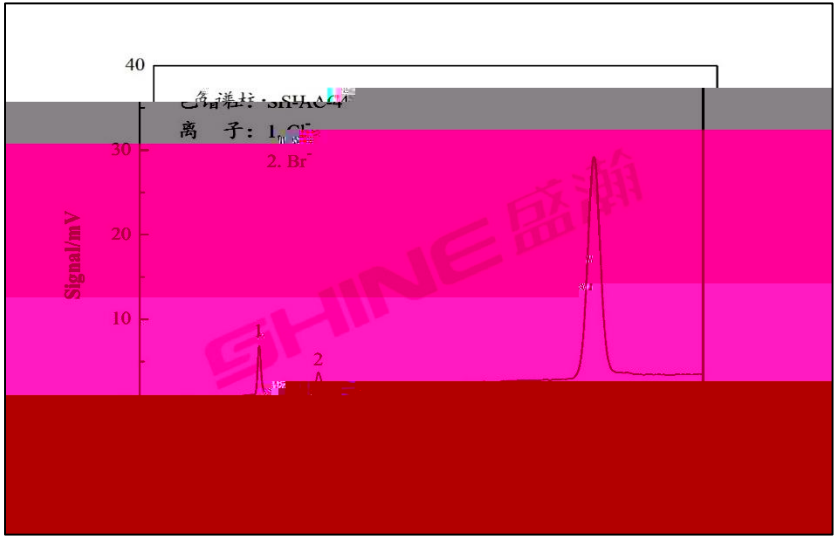
Cl



		mg	mg/kg	
(Cl)	1	19.7	193.5	102.2
	2	20	188.2	99.4
	3	19.4	193.1	102.0
	4	19.9	188.1	99.4
	5	17.6	190.8	100.7
			190.7	100.7
			2.6	
	RSD%		1.4	

PCB





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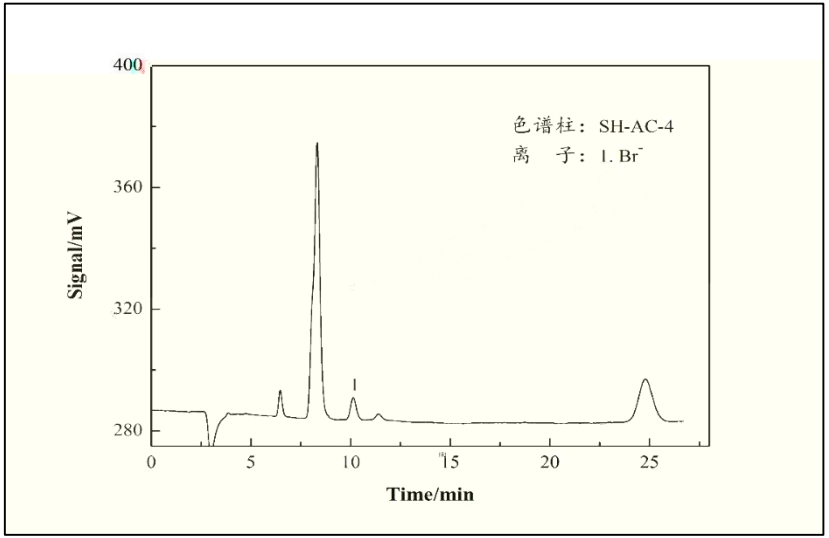
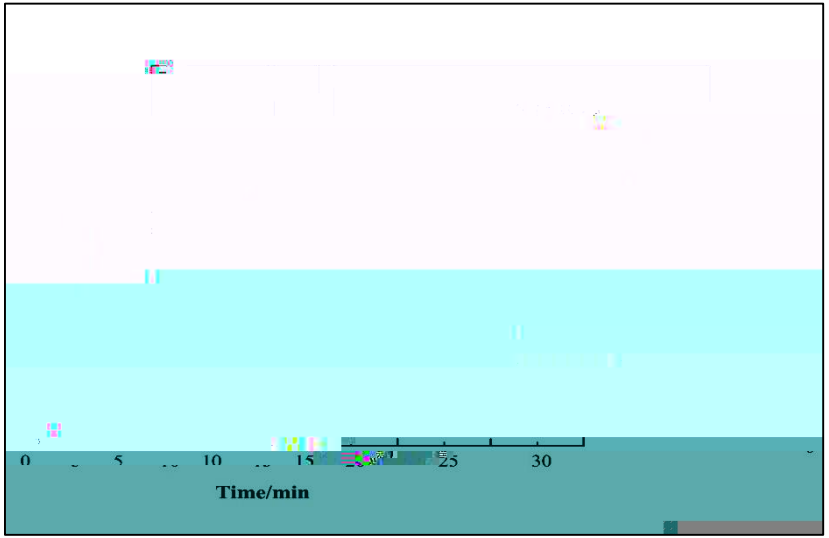
ABS - -


色谱柱：SH-AC-4
离 子：1. Br-
Signal/mV
Time/min
400
360
320
280
0
5
10
15
20
25


Time/min
0
10
15
25
30

Q&A