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Evaluating Construction of Grofit film

Background: Marcella Possenti/Carte Dozio submitted a sample of Grofit film to Cortec Corporation. A chemical composition analysis of the Grofit film is sought.

Purpose: Determine the chemistry of the submitted Grofit film.

Method: FT-IR
GC/Mass Spectrometry

Materials: Perkin Elmer FT-IR Spectrometer Paragon 1000
Hewlett Packard 5890A Gas Chromatograph
Grofit film (4 mil)

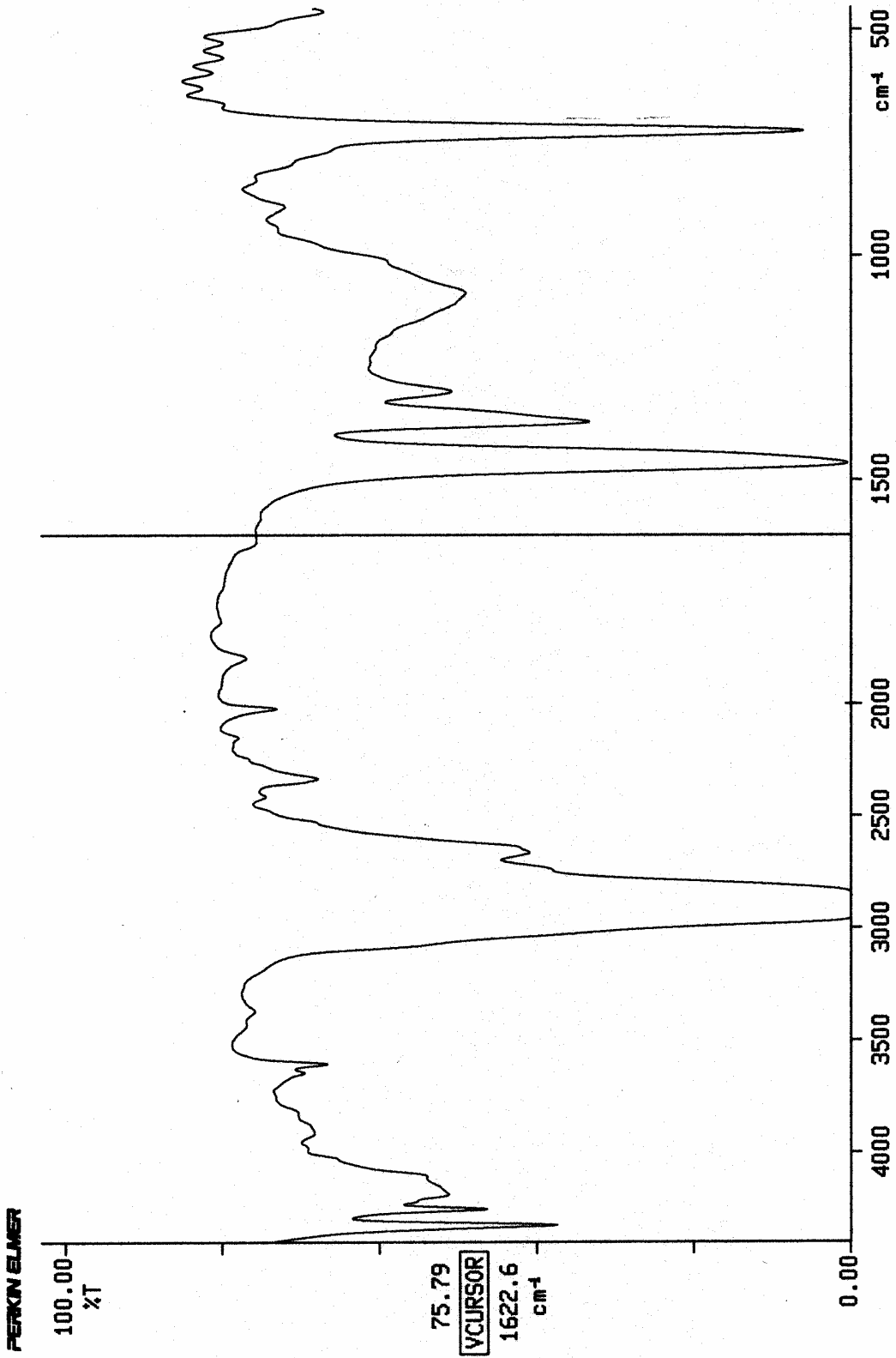
Procedure: The above tests were performed according to standard procedures for each.

Results: FT-IR spectrum results show the presence of a desiccant peak.
GC/Mass Spectrometry results show the presence of salt of dicyclohexylamine.

Conclusion: Construction of Grofit film looks to contain low density polyethylene, a desiccant such as silica, and salt of dicyclohexylamine (secondary amine)

Project #: 05-050-1125





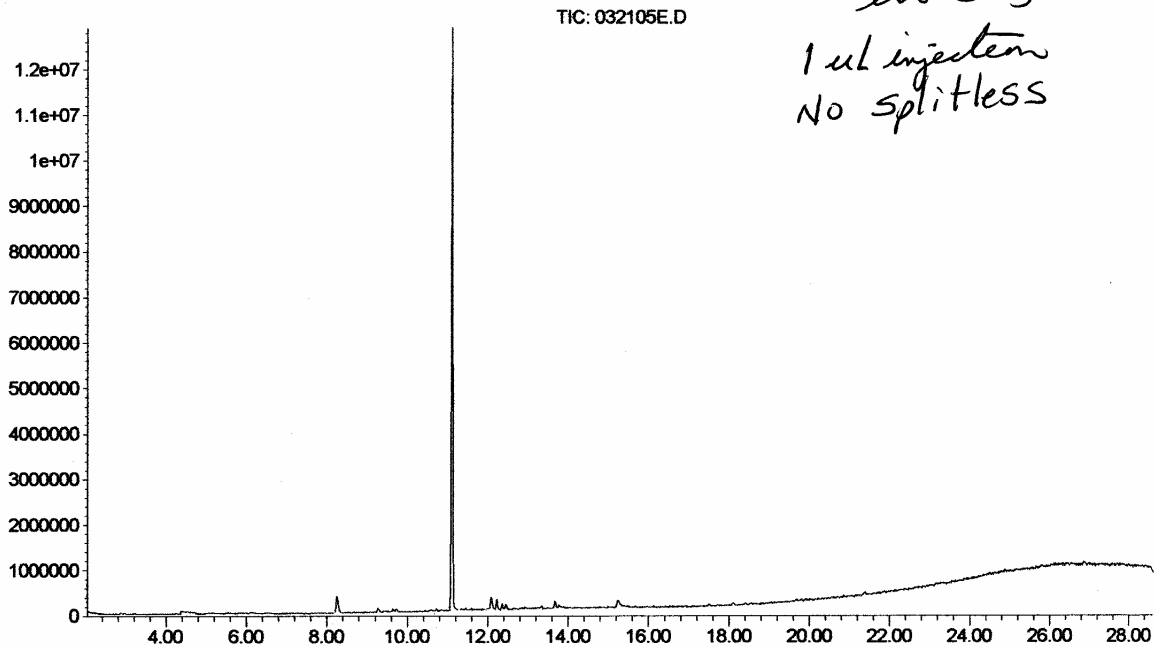
05/03/18 14:57 unspecified
X: 8 scans, 16.0cm-1
grofit vci film

A5-050-1125

File : C:\HPCHEM\1\DATA\032105E.D
Operator : bruce
Acquired : 21 Mar 2005 13:08 using AcqMethod BTA1
Instrument : GC/MS Ins
Sample Name: Grofit Ext(Bob)
Misc Info :
Vial Number: 9

5

Grofit Extract
in CH₃OH
1 ul injected
No splitless

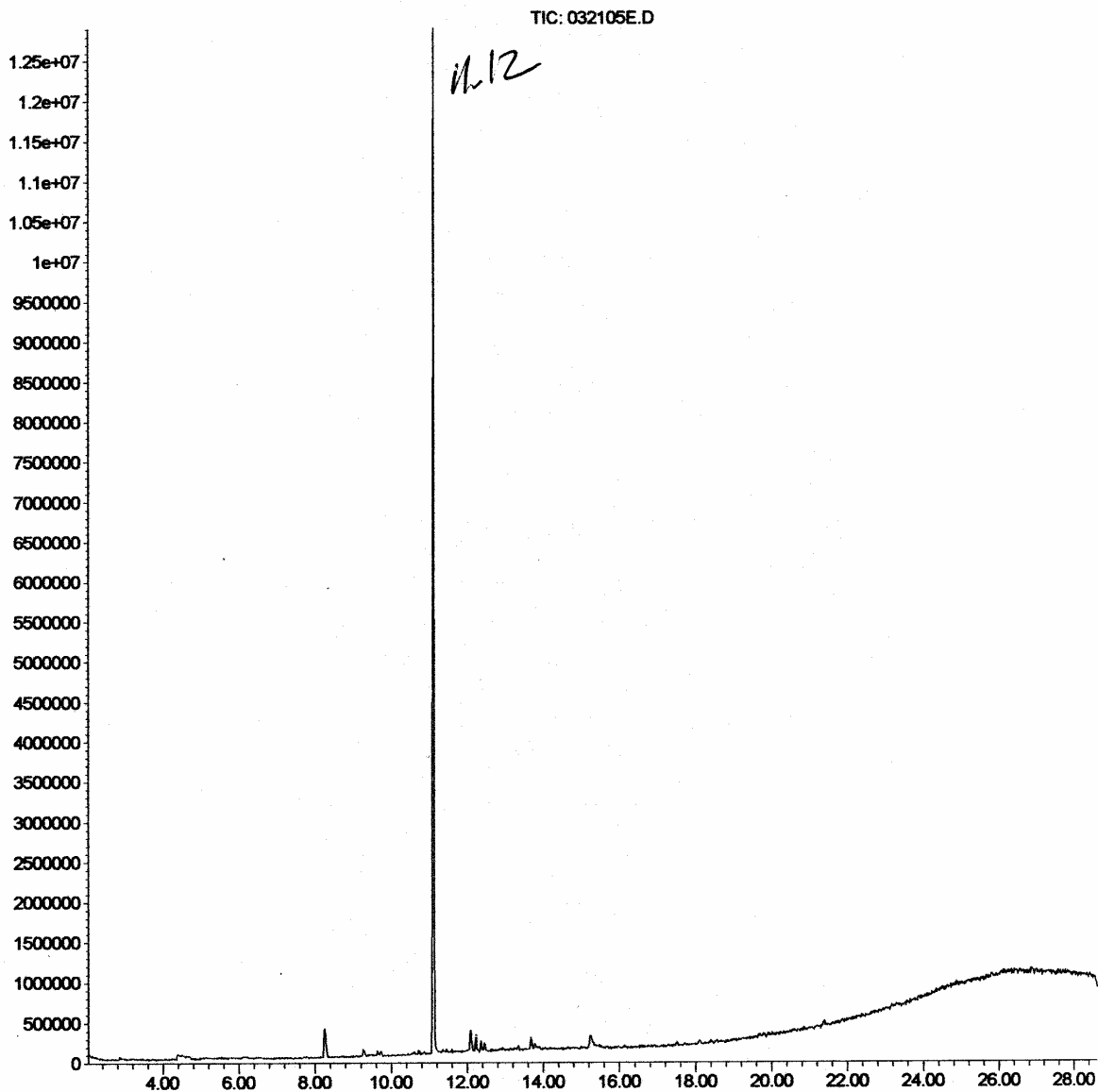


Area Percent Report

Data File : C:\HPCHEM\1\DATA\032105E.D
Acq On : 21 Mar 2005 1:08 pm
Sample : Grofit Ext (Bob)
Misc :

Vial: 9
Operator: bruce
Inst : GC/MS Ins
Multiplr: 1.00
Sample Amount: 0.00

MS Integration Params: events.e
Method : C:\HPCHEM\1\METHODS\BTA1.M (Chemstation Integrator)
Title :



032105E.D BTA1.M Mon Mar 21 13:37:06 2005

Area Percent Report

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 Sample Amount: 0.00

MS Integration Params: events.e

Method : C:\HPCHEM\1\METHODS\BT1.M (Chemstation Integrator)
 Title :

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	peak area	peak % max.	% of total
1	8.246	561	568	583	VV	360492	13736278	4.72%	4.077%
2	11.118	823	830	849	PV	12297720	291294261	100.00%	86.452%
3	12.093	907	919	926	VV 2	282137	10945331	3.76%	3.248%
4	12.235	926	932	939	VV	221384	6198696	2.13%	1.840%
5	12.367	939	944	949	PV	122909	2822505	0.97%	0.838%
6	13.682	1050	1064	1069	PV 3	149218	4600733	1.58%	1.365%
7	15.249	1198	1207	1216	PV 5	147423	7346159	2.52%	2.180%

Sum of corrected areas: 336943963

032105E.D BT1.M Mon Mar 21 13:37:06 2005

Information from Data File:

File: C:\HPCHEM\1\DATA\032105E.D
 Operator: bruce
 Date Acquired: 21 Mar 2005 13:08
 Method File: BTA1
 Sample Name: Grofit Ext(Bob)
 Misc Info:
 Vial Number: 9

Search Libraries: C:\DATABASE\NBS75K.L Minimum Quality: 0

Unknown Spectrum: Apex
 Integration Events: Chemstation Integrator - autoint1.e

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
1	8.25	4.20	C:\DATABASE\NBS75K.L			
			Methenamine	65990	000100-97-0	72
			Methenamine	65989	000100-97-0	72
			1,2-Benzenediol, 3-methoxy-	7319	000934-00-9	40
2	11.12	92.92	C:\DATABASE\NBS75K.L			
			Cyclohexanamine, N-cyclohexyl-	18113	000101-83-7	91
			2-Acetamido-2-deoxy-d-mannonic aci	31200	000000-00-0	90
			Dimecamine	18112	003570-07-8	80
3	12.09	2.88	C:\DATABASE\NBS75K.L			
			1,1'-Biphenyl, 4-methyl-	68135	000644-08-6	76
			1,1'-Biphenyl, 2-methyl-	14811	000643-58-3	70
			1,1'-Biphenyl, 3-methyl-	68130	000643-93-6	68