Gas Chromatography-Mass Spectroscopy conditions to run 6-Chloronicitinoic Acid and 6-Hydroxynicitinoic Acid and sample preparation [1]:

Materials Needed:
GC vials
GC vial micro-inserts
GC vial caps
Nitrogen Gas
Pyridine
BSTFA + TMSC 99:1 (Derivatizing Agent)
Vortex
GC/MS
Pipet

GC/MS Conditions:

GC Temperature Program			
	°C/min	Temperature (°C)	Minutes
Initial	-	80	2.00
Ramp 1	5.0	100	0.00
Ramp 2	15.00	300	10.00

Oven Configuration:	
Max Temperature (°C)	320
Equilibration time (min)	0.50

Temperatures MSD:	
Set Point Quad:	150
Set Point Source:	230

Inlet Temperature:	
Initial Front (°C)	280
Initial Back (°C)	

Auxiliary Channel #2	
Temperature (°C)	290
Type	MSD

Solvent Delay (min)	4
Injection volume (µL)	1

Protocol:

1) Solvent that the sample is resuspended in is evaporated with nitrogen gas.
2) The residue is resuspended in 100 µL of Pyridine and transferred to GC vials with micro-inserts.
3) 100 µL of the derivatizing agent is added and vortexed for approximately 10 seconds or until the mixture was homogenous.
4) After one hour, samples are run on the GC/MS using the above conditions.

References:

[1] Use of High-Performance Liquid Chromatography–UV and Gas Chromatography– Mass Spectrometry for Determination of the Imidacloprid Content of Honeybees, Pollen, Paper Filters, Grass, and Flowers- S-Rossi.