

## Hydrolysis & Extraction of Fat from Nut Products

## Procedure

Step 1- Hydrolysis Method

For hydrolysis method, see "The Extraction of Fat from Low, Middle, and High Fat Foods" Application Note Step 2 - EDGE Method

1. G0 refers to a G1 Q-Disc with a Q-Support. Place a G1 Q-Disc into the bottom of the Q-Cup. Place a Q-Support on top of the G1 Q-Disc and assemble the Q-Cup.

2. Place the filter with hydrolyzed sample in the Q-Cup.

3. Insert a Q-Screen into the Q-Cup using the Q-Screen tool.

## Notes

If not performing hydrolysis, proceed to EDGE Method

Sample types: peanut butter, hazelnut paste, brazil nuts, cashews, hazelnuts, peanuts, and pumpkin seeds This is not an exhaustive list of bossible sample types

Sorbents	Solvents
N/A	Petroleum Ether

Sample Weight		Equipment		Q-Disc	
≤2 g		EDGE Q-Screen 60 mL collection vials Q-Support		G0	
Heating Program					
Cycle	Top Add (mL)	Bottom Add (mL)	Rinse (mL)	Temp (°C)	Hold (mm:ss)
1	30	0	0	140	5:00
2	30	0	0	140	5:00

Note: Temperature and hold times may vary depending on the sample and analytes of interest.

Wash Program				
Cycle	Solvent	Volume (mL)	Temp (°C)	Hold (mm:ss)
1	Petroleum Ether	30	30	0:15
Conorol Guidalinas				

## General Guidelines

a) This procedure is a reference point for sample extraction using a CEM system and may need to be modified or changed to obtain required results on your sample or analytes of interest.

b) Wear hand, eye, and body protection when handling organic solvents.

c) Any of CEM's collection vials/centrifuge tubes in the correct size for the rack owned may be used.

d) Verify needed solvents are loaded onto the system with sufficient volume. Load the rack containing sample(s) into the EDGE. Select the method and position to load method. Press play and add any any sample ID's, etc. as needed.

e) Bring to volume or evaporate as necessary for analysis.