

Weight of krill lipids in filter agitation acetone technique

Cup 7:  $1.0548\text{g} - 0.9864\text{g} = 0.0684\text{g}$

Cup 8:  $1.0561\text{g} - 0.9860\text{g} = 0.0701\text{g}$

Cup 9:  $1.0566\text{g} - 0.9886\text{g} = 0.068\text{g}$

$X = 0.0688\text{g}$

% of krill lipids of the dry polytron weight acetone technique

$0.799\text{g}/2\text{ml} = x/10\text{ml}$   $x = 0.3995\text{ g}$

$0.3995\text{g}/5\text{g} = x/100\text{g}$   $x = 7.99\%$

% of krill lipids of dry weight agitation acetone technique

$0.1973\text{g} / 2\text{ ml} = x/ 10\text{ml}$   $x = 0.9865\text{g}$

29/7/98: 7 mL instead of 10 mL? 13.81% rather than 19.73%. Where did the 3mls that SI pipetted go? 10 ml acetone.  $X = 19.73\%$

$0.9865\text{g}/5\text{g} = x / 100\text{g}$

% of krill lipids of the dry polytron filter weight acetone technique

$0.0760\text{g}/2\text{ mL} = x/ \text{ml}$   $x = 0.3800\text{g}$

$0.3800/5\text{g} = x/100\text{g}$   $x=7.6\%$

% of krill lipids of the dry filter weight agitation acetone technique

$0.0688\text{g}/ 2\text{ mL} = x/10\text{ mL}$   $x = 0.3440\text{g}$

$0.3440\text{g}/5\text{g} = x/100\text{g}$   $x=6.88\%$

6/3/98 Results: acetone technique yield

Krill homogenized to polytron: 7.99 g lipids/ 100g dry weight

Krill homogenized by agitation: 19.73g lipids/ 100g dry weight

Results: acetone and contents technical yield

filtered in ethanol re-suspension MeOH

Krill homogenized polytron: 7.99 lipids /100g dry weight + 7.60g lipids/ 100g dw = 15.59g/ 100g

See 2<sup>nd</sup> and 3<sup>rd</sup> trials -> Krill homogenized agitation: 19.73g lipids/100g dw + 6.88g lipids 100g dw = 26.61g/ 100g dw

08

OK 9/3/98 re-done

Experiments to be done: re-do extraction with 5 g acetone dry krill agitation (given the 19.73% result) 3/10/98 recovery ethanol filter deposit OK 3/9/98 re-done

Re-do extraction OK

Chloromethanol (to validate the results) 9/9/98 re-done

Do acetone extraction

[notes in the side margins; cut off so it's just the translation of the visible words: And to verify the impact of the solvent volume on the efficacy of the extraction]

Ethanol 1:1 (50 mL total) 10/3/98 re-done rinse with 25 mL total

Change the solvent volumes (double 100 mL)

6/3/98

After evaporation, re-suspend in 10mL acetone-ethanol 1:1

12/3/98 done fresh krill acetone technique

Procedure (1<sup>st</sup> trial): weigh 25g fresh krill 25.08g

225 mL pure cold (freezer) acetone

agitation 20 min (27 min)

\*← vacuum filtration ~~and recovery of the filter deposit~~ (not the first time) rinse cold acetone /illegible English addition/

Up to 85 C° Evaporation acetone (revolving evapo) pay attention to bubbles

Vacuum = ? No bubbles

11/3/98

Cold the H<sub>2</sub>O lipid mixture on ice

Add hexane or pentane 25 mL

To H<sub>2</sub>O – lipids mixture

Decantation ampulla, mix

See p. 15

Collect lipids and hexane

Evaporation (rotating evapo)

Re-suspend 10mL hexane

Vacuum evaporation



Filter deposit re-suspend mix 100 mL EtOH  
     2 papers Whatman 12.5cm 202  
 Ordinary filtration keep powder good for fish  
 11/3/98 Vacuum =? Evaporation  
 We had to heat a lot to compensate for the mediocre vacuum  
 85°C bath water  
 Re-suspension ethanol 10 mL  
 Evaporation  
 Weighing lipids, average  
     Chloro technique MeOH  
 6/3/98: Preparation of the egg lipids (standard)  
 1 egg yolk transfer pipette  
 Chloro 50 mL  
 Methanol 25 mL  
 15 mL saline  
 mix decantation ampulla  
 let it separate | one weekend  
 9/3/98 Evaporation (rotating evaporation)  
 Re-suspension 10 mL chloroforme – methanol 1:1  
 3 samples of 2mL each  
 Transfer each 2 mL in aluminum cups  
 Evaporation without N  
 Egg ← Weighing lipids, average  
 Tech. chloro – MeOH Egg  
 Cup 1 1.0150g 1.1548g 1.1777 with lipids 1.1667g 1.1670g  
 Cup 2 1.0154g 1.1642g 1.1737g      1.1644g 1.1659g  
 Cup 3 1.0134g 1.1621g 1.1758g      1.1652g 1.1623g

6/3/98 Look for Medline acetone

Acetone toxicity

Lipids classes

Calamus

6/3/98 Calculations: krill lipids weight technique chloroforme methanol)

Cup 1:  $1.1470\text{g} - 0.9927\text{g} = 0.1543\text{g}$

Cup 2:  $1.1447\text{g} - 0.9891\text{g} = 0.1556\text{g}$

Cup 3:  $1.1709\text{g} - 1.0155\text{g} = 0.1554\text{g}$

$X = 0.1551\text{g}$

% of lipids in dry weight chloro-MeOH technique

$0.1551\text{g}/2\text{mL} = x/10\text{ mL}$   $x = 0.7755\text{g}$   $0.7755\text{g}/5\text{g} = x/100\text{g}$   $x = 15.51\%$

Result: chloroforme-methanol technical yield

15.51 g lipids/ 100g krill dry weight

9/3/98 Notes: possibility of water in the egg lipids, chloroform, methanol, saline solution since the mixture was boiling at evaporation under rotating evaporator (perhaps because I washed the bubble with water)

Empty 11/3/98 with lipids 10/3/98

Cup 4	1.0160g	1.0976g	1.0971g	1.0958g	1.0959g
Cup 5	1.01531g	1.0956g	1.0938g	1.0965g	1.0973g
Cup 6	1.0190g	1.0977g	1.0997g	1.0995g	1.0993g

Note: instead of letting it rest for one night, the ampulla solution (methanol chloroform recovery method from 5/3/98 and 6/3/98) rested 5 and a half hours.

Cup 7	1.0218g	1.1778g	1.1687g	1.1654g
Cup 8	1.0188g	1.1788g	1.1679g	1.1668g
Cup 9	1.0227g	1.1826g	1.1729g	1.1719g

10/3/98 Calculations: egg lipids weight chloroform methanol technique

cup 1:  $1.1670\text{g} - 1.0150\text{g} = 0.1520\text{g}$

cup 2:  $1.1659\text{g} - 1.0154\text{g} = 0.1505\text{g}$

cup 3:  $1.1623\text{g} - 1.0134\text{g} = 0.1489\text{g}$

$x = 0.1505\text{g}$

% of egg lipids of dry weight with chloro-MeOH technique

$0.1505\text{g}/2\text{ mL} = x/10\text{mL}$   $x = 0.7525\text{g}$

$0.7525\text{g}/5\text{g} = x/100\text{g}$   $x = 15.05\%$

(transfer pipette)

10/3/98 Calculations: Krill lipids weight chloro-MeOH technique 2<sup>nd</sup> trial

Cup 7:  $1.1687\text{g} - 1.0218\text{g} = 0.1469\text{g}$

Cup 8:  $1.1679\text{g} - 1.0188\text{g} = 0.1491\text{g}$

Cup 9:  $1.1729\text{g} - 1.0227\text{g} = 0.1502\text{g}$

$X = 0.1487\text{g}$

% krill lipids dry weight chloro-MeOH technique

$0.1487\text{g}/2\text{ mL} = X/10\text{ mL}$   $x = 0.7435\text{g}$

$0.74325\text{g} / 5\text{g} = x/100\text{g}$   $x = 14.87\%$

10/3/98 empty 12/3/98 with lipids 11/3/98  
filter deposit agitation acetone technique 2<sup>nd</sup> trial 10/3/98

Cup 1: 1.0268g	1.1348g	1.1679g	1.1388g	1.1347g
Cup 2: 1.0275g	1.1342g	1.1518g	1.1390g	1.1364g
Cup 3: 1.0250g	1.1316g	1.1525g	1.1370g	1.1323g (2 <sup>nd</sup> trial)

Calculations: krill lipids weight agitation acetone technique

Cup 4:  $1.0959\text{g} - 1.0160\text{g} = 0.0799\text{g}$

Cup 5:  $1.0973\text{g} - 1.0131\text{g} = 0.0842\text{g}$

Cup 6:  $1.0993\text{g} - 1.0190\text{g} = 0.0803\text{g}$   $X = 0.0815\text{g}$

Krill lipids weight in filter agitation acetone technique 2<sup>nd</sup> trial

Cup 1:  $1.1388\text{g} - 1.0268\text{g} = 0.1120\text{g}$

Cup 2:  $1.1390\text{g} - 1.0275\text{g} = 0.1115\text{g}$

Cup 3:  $1.1370\text{g} - 1.0250\text{g} = 0.1120\text{g}$   $X = 0.1118\text{g}$

% of krill lipids of dry weight agitation acetone technique 2<sup>nd</sup> trial

$0.0815\text{g}/2\text{mL} = X/10\text{ mL}$   $x = 0.4075\text{g}$

$0.4075\text{g}/5\text{g} = x/100\text{g}$   $x = 8.15\%$  (next page)

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.