

# All about frying

with

**MIR<sup>®</sup>IL**

***fryliquid™***  
antioxidant

More savings with  
New plan for freshening

New automatic Input  
Meter for *fryliquid™*

New *OptiFry™* Oil Tester  
for control of oil quality



**Enhance the performance of all oils**



**fryliquid™**  
antioxidant

Why use **MIR●IL® fryliquid™**?

**fryliquid™ is about better fried food!**

**Your food will taste better, look better and cook faster** with hotter centers.

**You will save money** . . Because the food will absorb less oil . . and you will discard less oil.

Without **fryliquid™** Progressive Diminished Quality of food sets in as your oil gets older.

With **fryliquid™** you are able to prevent **PDQ** and the oil is always good.



**How does fryliquid™ work in my fryer?**

Every oil contains antioxidants. They protect the oil while it is waiting to be used.

**All** antioxidants are consumed as they prevent breakdown reactions. The antioxidants in fresh oil do not work when the oil is heated so they burn up quickly.

**fryliquid™** delivers an antioxidant effect that acts like a “vitamin” therapy to prevent unhealthy breakdown reactions while you fry!



**Why are the benefits of fryliquid™ so different?**

Other products try to restore the oil when you filter. **fryliquid™** prevents the oil from breaking down **while** you fry. This means premium oil performance and longer oil life.

The oil is always good when you use **fryliquid™** with the **MIR●IL** plan for Optimum Frying. Also the oil never smokes and never foams. You avoid carbon and gum deposits.



**What is fryliquid™? Is fryliquid™ safe to use?**

This revolutionary product is a “cocktail” of natural ingredients that are found in food.

**When do I add fryliquid™?**

**All** antioxidants are consumed as they accomplish their mission to prevent oxidation breakdown reactions. So be sure to add **fryliquid™** before each meal session and according to instructions on the label. Add **fryliquid™** before breakfast, lunch and dinner for full effect.



**What if I use too much fryliquid™?**

Tests with double and even triple size portions were found to give extra value.

There are no adverse effects from adding larger quantities to the oil.

Choose the portion that matches how you want the food to cook.

**What if I don't use enough fryliquid™?**

The product won't work if you don't use it . . and . . if you don't use enough **fryliquid™** benefits will be diminished. Use the suggested “portion” to receive the best value.





## How much fryliquid™?

fryliquid™  
antioxidant



Choose the portion according to the amount of oil in your fryer.

Choose the “B” size portion

If your fryer holds 50 to 60 lbs or 28 to 34 quarts or 26 to 32 liters

A full “B” size portion amount is between 2 thick lines or 2 thin lines on the label.

If your fryer holds twice as much oil, then use 2 of the “B” size portions.

If your fryer holds  $\frac{1}{2}$  as much oil, then use  $\frac{1}{2}$  of the “B” size portion.

The  $\frac{1}{2}$  portion is between a thicker line and a thinner line on the label.

Choose the “C” size portion

If your fryer holds 35 to 40 lbs or 20 to 24 quarts or 19 to 23 liters

A full “C” size portion amount is between 2 thick or 2 thin lines on the label.

If your fryer holds twice as much oil, then use 2 of the “C” size portions.

If your fryer holds  $\frac{1}{2}$  as much oil, then use  $\frac{1}{2}$  of the “C” size portion.

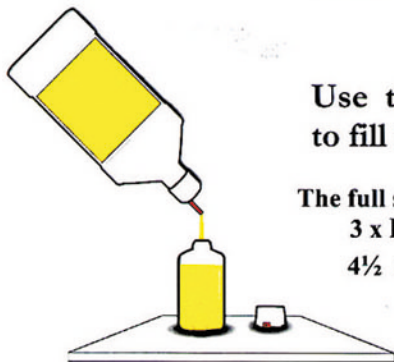
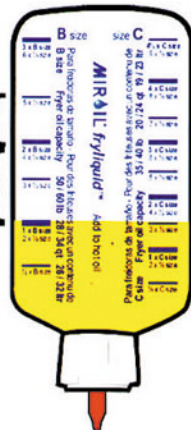
The  $\frac{1}{2}$  portion is between a thicker line and a thinner line on the label.

Between a thicker and thinner line for  $\frac{1}{2}$  portion

A FULL portion is equal to 2 x  $\frac{1}{2}$  portions

Use the large bottle  
to fill the small bottle

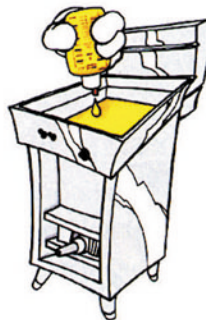
The full small bottle contains:  
3 x B size portions or  
 $4\frac{1}{2}$  x C size portions



Use the small bottle to add fryliquid™ to the oil

**Hold the small bottle 12" above the oil**  
**when you add fryliquid™ into the fryer**

Squeeze the small bottle gently until the  
portion matches the size of your fryer.



**NEVER pour fryliquid™ into the fryer from the big bottle!**

Use the big bottle to fill the small bottle.

The small bottle dispenses and measures the proper portion.

With traditional Oil Management you finally discard the “bad” oil because:

- a. As the oil gets older there is **Progressive Diminished Quality (PDQ)** of your food.



- b. As the oil gets older more oil is absorbed by the food and more top up oil is needed.  
This is why longer oil life may not save money!

The extra top up oil often erases savings from less discard oil. See table below.



- c. You finally discard the “bad” oil because you are confronted with:  
“Do we keep the oil and save some money?”  
Or “Do we discard the oil and save some customers?”

Look at this table to see the daily cost when you finally discard the oil. See how small the savings from longer life of oil really are. This may help you understand why longer oil life with traditional oil management diminishes food quality and does not save a lot of oil. In many cases longer oil life actually uses more oil.

This table is for the popular size fryer that holds 50 lbs or 30 quarts of oil.

Days of Oil Life

Cost per day for discarded oil

5.0 days	6.0 quarts
6.0 days	5.0 quarts - saves only 1 extra quart per day
7.5 days	4.0 quarts - saves only 1 extra quart per day
10.0 days	3.0 quarts - saves only 1 extra quart per day
15.0 days	2.0 quarts - saves only 1 extra quart per day



**Use *fryliquid*™ if you just want longer life of the oil**

To always have good food and \$ave on oil costs,  
use *fryliquid*™  
and the simple **MIR●IL** plan for **Optimum Frying**

To always have good food and use less oil, you want to use the **MIR<sup>o</sup>IL** plan for oil management for **Optimum Frying**.

**fryliquid™**  
antioxidant



## What is **Optimum Frying**?

The oil is always good so the food is always great.

The oil never smells . . . The oil never smokes . . . The oil never foams . . . The fryers are free of almost all carbon and gum deposits.



You will save on costs because:

you will discard less oil . . and

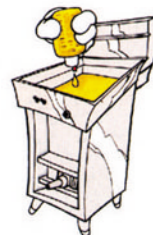
you will use less oil for topping up fryers  
and you will use less energy for cooking.



## oil management plan for **Optimum Frying**



- 1. Add *fryliquid*™ to prevent oil breakdown reactions**  
If you use *fryliquid*™, and do not use part 2 and 3 of the **MIR<sup>o</sup>IL** plan then your oil will last longer and food quality will diminish more slowly **BUT** you will not receive important benefits like more savings on oil and on energy for cooking, plus clean fryers without carbon and gum deposits.



- 2. Freshen the oil daily**  
This prevents breakdown reactions and keeps the oil healthy. This is an important procedure to keep the oil always good! See next page for more information about freshening.



- 3. Set the temperature from 325°F (162°C) to 340°F (171°C)**  
Use *fryliquid*™ and lower temperatures will cook the food just as fast and even faster. This is not magic! When *fryliquid*™ is added, the oil cooks just like fresh oil. Fresh oil provides maximum heat delivery to food centers and minimum heat diversion to overcook food surfaces. How much **ON** time and how high the temperature is much more damaging to oil than the kind and the amount of food cooked. This is the third important step to prevent oil breakdown and to save on energy.







**fryliquid**  
antioxidant

## “Freshen” the oil each day for Optimum Frying

**Freshening is as easy as replacing some old oil with fresh oil.**

**Here is a **MIR**oil freshening plan . . . to save more oil!**

Use this Fryer Oil Capacity table for the amount of fresh oil to add into your empty fryer **when you filter**.

Fryer Oil Capacity		
35 lb. oil 20 quarts oil 340°Fmax	40 lb. oil 24 quarts oil 340°Fmax	50 lb. oil 30 quarts oil 340°Fmax
<b>*4 quarts</b>	<b>*5 quarts</b>	<b>*6 quarts</b>

\* Add more or less fresh oil for larger or smaller fryers.

\* This table is for fryer **ON times** of **12 to 14** hours.  
Add more or less fresh oil for different fryer ON times.

\* Add more fresh oil if you cook with temperatures higher than 340°F.

\* Add more fresh oil if you have very heavy crumb loads.

### Why remove some good oil every day?

Freshening saves on oil because it restores oil composition. This inhibits breakdown reactions (as more breakdown substances accumulate in the oil they cause more of themselves to form more quickly). This helps prevent the rest of the oil from becoming bad (just like antioxidants and lower temperatures prevent the oil from becoming bad).



### How much oil should I add for freshening?

The amount of oil to be added for freshening depends on:

1. How many hours the fryer is ON each day?
2. What temperature you choose for frying?
3. The size of the fryer (how much oil you need to fill the empty fryer?)
4. How much natural freshening - How much oil to top up and replace crumb?

### Follow this simple plan when you filter to restore and freshen the oil in each fryer

- a. Add fresh oil according to the “Fryer Oil Capacity” table

**This will be all the oil you will use each day with the **MIR**oil plan.**

This includes both top up for low oil level and for replacing the crumb volume.

- b. Finish filling the fryer to operating oil level with filtered oil.
- c. Discard the surplus oil remaining in the filter machine or filter basin. (See page 7 for other oil use.)

This example shows the improved oil life (“equivalent” life of the oil):

. . . For a total of 6 quarts of fresh oil added into an empty 30 quart fryer . . .

if the oil level is low by 2 quarts from cooking all day . . . and 1 quart of crumb is removed by filtering; we call this “natural” freshening because this 3 quarts is what you replace every day.

We call the 3 extra quarts of fresh oil, “supplementary” freshening.

The total of 6 quarts of fresh oil is a total of 20% fresh oil in the fryer every day.

When you do this as part of the **MIR**oil plan you will never need to discard a full fryer of “bad” oil.

In this example 3 extra quarts for supplementary freshening provides 10 days of “equivalent” life of oil.

In this example you have 3 quarts of natural freshening and 3 quarts of supplementary freshening.

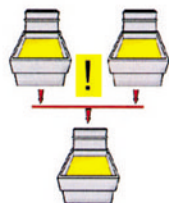
The plan works with all combinations i.e. 4 quarts of natural freshening and only 2 quarts of supplementary freshening. Only 2 quarts every day for supplementary freshening delivers “equivalent” oil life of 15 days.



## More benefits and tips for better frying

### **Fryliquid™ prevents flavor transfer between foods . . .**

Many users save oil by turning OFF more fryers on slow days or during slow hours. They also take advantage of this benefit and save even more oil by using fewer fryers to produce more food.



### **What happens to the good oil removed for freshening?**

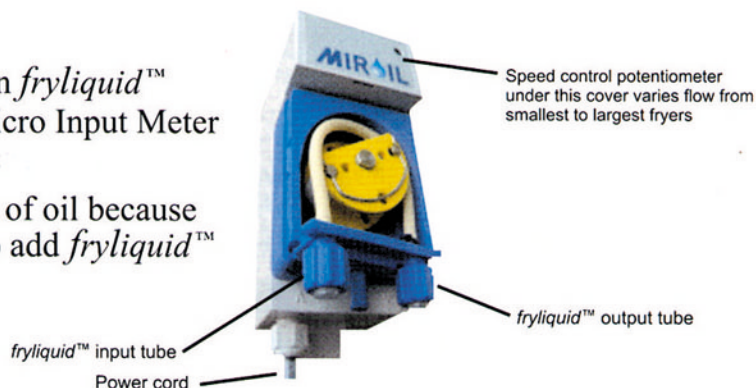
**This oil should be discarded if you have no other use for it.**

Many chefs use this good oil for other cooking purposes with faster browning and less sticking i.e. on the flat grill for hash browns, cooking in the wok, to pan fry or to saute.

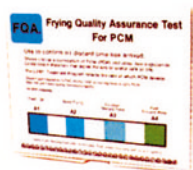
## Continuous automatic feed of *fryliquid™* is more efficient

Save up to 40% on *fryliquid™* with automatic micro Input Meter

Avoid breakdown of oil because someone forgot to add *fryliquid™*



## Confirm the composition of your oil *is always good and healthy*



Electronic oil tester  
for polar content of oil

Polar content is a snapshot of oil composition (how many breakdown and other substances have accumulated in the oil).

The **OptiFry™** tester has a built in calculator to report the amount of replacement fresh oil required to control the oil at a preferred healthy composition for best cooking performance.

**FQA Fry Quality Assurance Test**  
A quick test to confirm the polar content is OK according to European regulations.

Email for information on testing oil samples and oil testers.

[Info@miroil.com](mailto:Info@miroil.com)



# Welcome to a new world of frying!

**MIR<sup>®</sup>IL** *fryliquid<sup>™</sup>*  
antioxidant

***Fry healthier with MIR<sup>®</sup>IL fryliquid<sup>™</sup>***

Higher temperatures speed up formation of acrylamide and other unhealthy substances.

When you use *fryliquid<sup>™</sup>* the food will cook just as fast at lower oil temperatures and with hotter centers. This helps protect the oil and prevent formation of unhealthy substances.

**Try this quick demonstration procedure  
and see MIR<sup>®</sup>IL fryliquid<sup>™</sup> at work in your oil**

**The food will be crisper and hotter with a golden finish**

**All "fried oil" odors disappear**

**There is much less absorbed oil**

1. Fry some food in used oil and place this food on 3 paper towels.
2. Add a portion of *fryliquid<sup>™</sup>* into the oil. Add a second portion to older oil.
3. Wait 4 minutes, cook more food for the same time. Place on more paper towels.
4. Use a probe thermometer to confirm the food centers are hotter.

**If you have questions, please call us toll free at 800.523.9844**

**MIR<sup>®</sup>IL** Division of Oil Process Systems, Inc.

Allentown, PA 18109

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