

# All about frying

with

**MIR<sup>®</sup>**

**Fryp<sup>®</sup>owder**  
*antioxidant & filter aid*

Oil stabilizer when you fry  
Filter aid when you filter

More savings with  
New plan for freshening

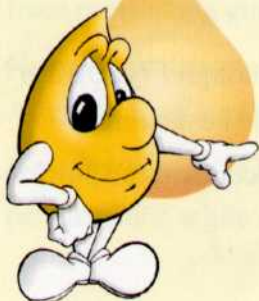
New *OptiFry*<sup>™</sup> Oil Tester  
for control of oil quality



Oil Stabilizer when you fry  
Filter aid when you filter

Follow use instructions for:

- Enhanced food quality
- Consistent food quality
- Reduced oil costs



Enhance the performance of all oils

**ZESCO.COM**

800-901-5051



## Why use **MIR<sup>o</sup>IL Frypowder<sup>®</sup>**?

### **Frypowder<sup>®</sup>** 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.

Progressive Diminished Quality of food sets in as your oil gets older without *Frypowder<sup>®</sup>*.

With *Frypowder<sup>®</sup>* you are able to prevent **PDQ**. When you do this, the oil is always good.



### How does **Frypowder<sup>®</sup>** work in my fryer?

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

These antioxidants burn up when the oil is heated and you begin to fry.

*Frypowder<sup>®</sup>* delivers an antioxidant effect that acts like a “vitamin” to prevent unhealthy breakdown reactions from happening while you fry.

*Frypowder<sup>®</sup>* is a unique adsorbent that agglomerates gums and prevents carbon deposits.



### How does **Frypowder<sup>®</sup>** work in my filter?

The *Frypowder<sup>®</sup>* mineral is an effective filter aid that leaves the fryer with the crumb and improves the performance of all filters and filter machines.

### Why are the benefits of **Frypowder<sup>®</sup>** so different?

Other filter aids work only when you filter. *Frypowder<sup>®</sup>* is able to prevent breakdown reactions all day **while** you fry. This assures premium oil performance and longer oil life.

When you use *Frypowder<sup>®</sup>* with the **MIR<sup>o</sup>IL** plan for oil management for Optimum Frying: the oil is always good; never smokes; never foams and you avoid gum and carbon deposits.



### What is **Frypowder<sup>®</sup>**?

### Is **Frypowder<sup>®</sup>** safe to use?

This multi function product is an adsorbent filter aid and an antioxidant oil stabilizer. *Frypowder<sup>®</sup>* is proven over 20 years to be safe in your fryers and your filters.

### When do I add **Frypowder<sup>®</sup>**?

### How much **Frypowder<sup>®</sup>**?

All antioxidants are consumed as they prevent oxidation breakdown reactions.

This is why you add *Frypowder<sup>®</sup>* every 5 to 8 hours.

Before each frying session is preferred. Before breakfast, before lunch and before dinner is preferred. The portion should match the oil capacity of the fryer. See page 3.



### What if I don't use enough **Frypowder<sup>®</sup>**?

*Frypowder<sup>®</sup>* can't work if you don't use it . . . and . . . if you don't use enough *Frypowder<sup>®</sup>* benefits will be diminished. Use the suggested “portion” to receive the best value.

If you have questions about the portion for your fry station, you may confirm the portion size with the MirOil test for ACM.





# How much Frypowder®?

Choose the portion size 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 in a "B" size portion packet or a full bulk portion cup.

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

If your fryer holds 1/2 as much oil, then use 1/2 of the "B" size portion.



## 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 is in a "C" size portion packet or the "C" size line on the bulk portion cup.

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

If your fryer holds 1/2 as much oil, then use the "D" size portion.

## Choose the "D" size line on the bulk portion cup (80 ml)

If your fryer holds 17 to 20 lbs or 10 to 12 quarts or 9 to 12 liters

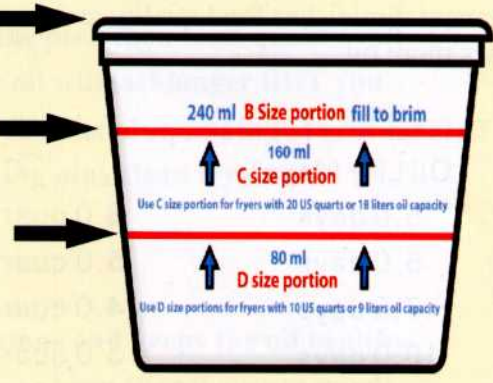
A "D" size portion on the bulk portion cup is 1/2 of a "C" size portion.

Fill to here for a "B" size portion

Fill to here for a "C" size portion

Fill to here for a "D" size portion

Use multiple portions for fryers larger than listed here.



## Transition symptoms may happen if your fryers have gum and carbon deposits

When you start using Frypowder® there may be a delay in the delivery of maximum improvement of food quality with Frypowder® due to transition symptoms. Transition symptoms happen because Frypowder® frees preexisting gums from fryer surfaces.

Heavy gum deposits usually clear up in 1 to 4 days. The carbons deposits begin to break loose in 3 to 5 weeks. After the fryer surfaces are clean, they will stay clean.

If your fryers have heavy carbon and gum deposits, you may prevent the delay in improved cooking performance while Frypowder® cleans fryer surfaces by doing a boil out.



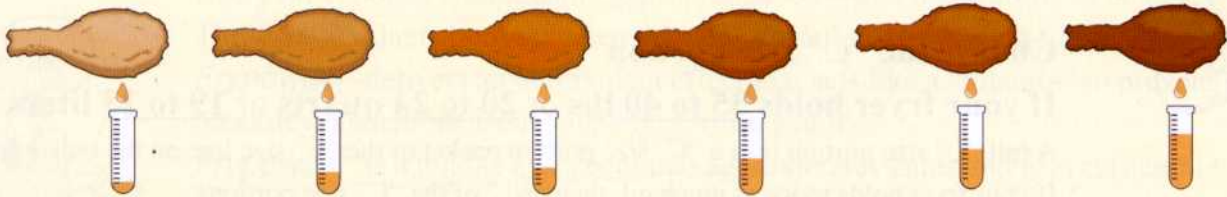
With traditional Oil Management you finally discard the “bad” oil because:

- 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.

Oil Life (days)	Cost per day for discarded oil (quarts)
5.0 days	6.0 quarts
6.0 days	5.0 quarts - only saves 1 quart per day over 5 day life
7.5 days	4.0 quarts - only saves 1 quart per day over 6 day life
10.0 days	3.0 quarts - only saves 1 quart per day over 7½ day life
15.0 days	2.0 quarts - only saves 1 quart per day over 10 day life

Use **Frypowder®** if you just want longer life of the oil



To always have good food and \$ave on oil costs,  
use **Frypowder®**  
and the simple **MIR<sup>o</sup>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**.

## What is Optimum Frying?

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

The oil never smells . . . The oil never smokes . . . The oil never foams . . . The fryers are free of 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.



## The oil management plan for Optimum Frying



- 1.** *Frypowder*<sup>®</sup> antioxidant in the oil as you fry prevents more oil breakdown reactions. If you use *Frypowder*<sup>®</sup> only when you filter and do not use *Frypowder*<sup>®</sup> in the oil when you fry or if you do not use part 2 and 3 of the plan then food quality will diminish more slowly and your oil will last longer BUT you will not receive important benefits like more savings on oil and savings on energy for cooking plus clean fryers.



- 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 the next page for more information about freshening.



- 3.** Set the temperature between 325°F (162°C) and 340°F (171°C)  
Use *Frypowder*<sup>®</sup> and lower temperatures will cook the food just as fast and even faster. This is not magic! When *Frypowder*<sup>®</sup> 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.





# “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°F <sub>max</sub>	40 lb. oil 24 quarts oil 340°F <sub>max</sub>	50 lb. oil 30 quarts oil 340°F <sub>max</sub>
<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 - This is how much oil for top up and to 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**

for 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 as “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 this is “natural” freshening because this 3 quarts is what you replace every day.

The 3 extra quarts of fresh oil is “supplementary” freshening.

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

When you follow this plan you will never discard a full fryer of “bad” oil.

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

The 3 extra quarts of supplementary freshening is the same as an oil life of 10 days.

The plan works with all combinations of natural and supplementary freshening. High volume and heavy crumb load may require only 2 quarts for supplementary freshening. This is an “equivalent” oil life of 15 days.



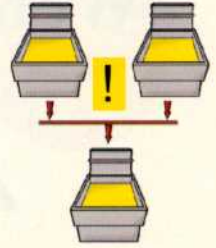


# More benefits and tips for better frying

## **Frypowder® prevents flavor transfer between foods . . .**

Many users take advantage of this benefit and save even more oil by using fewer fryers to produce more food.

They also save oil by turning OFF more fryers on slow days or during slow hours.



## **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.

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

With **OptiFry™** Electronic Oil Tester for polar content of oil



The **OptiFry™** tester quantifies polar content. This is a snapshot of how many breakdown substances are present 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 oil testers and testing oil samples.

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

**Welcome to a new world of frying!**

**MIR<sup>●</sup>IL Frypowder<sup>®</sup>**  
*antioxidant & filter aid*

***Fry healthier with MIR<sup>●</sup>IL Frypowder<sup>®</sup>***

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

When you use *Frypowder<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 Frypowder<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 *Frypowder<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