



TKO Tropical Punch Milkshake IPA

A large dose of late whirlpool hops creates a blast of tropical fruit that hits you right in the kisser. Malted oats and flaked wheat deliver a one-two combination of smooth silkiness for a pillowy mouthfeel that will lay your taste buds down for the count.

IBUs: 43 - 47	OG: 1.061 - 1.065	FG: 1.017 - 1.021
ABV: 5.8% - 6.3%	Difficulty: Advanced	Color: Hazy Pale Gold

Contents	
• Ingredients	• Priming Sugar
• Grain Bag(s)	• Bottle Caps
• Brewing Procedures	

Glossary	
OG Original Gravity	DME Dried Malt Extract
SG Specific Gravity	LME Liquid Malt Extract
FG Final Gravity	IBU International Bittering Units (<i>Tinseth</i>)
CO2 Carbon Dioxide	ABV Alcohol by Volume

Ingredients
FERMENTABLES
6.6 lb. Extra Light LME
1 lb. Corn Sugar
1 lb. Lactose
SPECIALTY GRAINS
8 oz. Flaked Wheat
8 oz. Malted Oats
4 oz. Flaked Oats
HOPS
1 oz. Columbus
4 - 1 oz. Packs Idaho 7
YEAST
1 Sachet
FLAVORING
Brewer's Best® Natural Tropical Blast Flavoring 4 oz.

Recommended Procedures

BREW DAY (DATE ___ / ___ / ___)

1. READ

Read all of the recommended procedures before you begin.

2. SANITIZE

Thoroughly clean and sanitize ALL brewing equipment and utensils that will come in contact with any ingredients, wort or beer with a certified sanitizer, e.g., Star San or IO Star.

3. STEEP GRAINS & FIRST WORT HOPPING



Pour 2.5 gallons of clean water into your brew pot and begin to heat¹. Pour all specialty grains into grain bag and tie a loose knot at the top of the bag². When the water is within an appropriate steeping temperature (150° - 165°F) place the grain bag into the brew pot³. **Next, empty 1 oz. pack of Columbus hops into the 11" hop bag and place them in the brew pot⁴.** Steep grains and hops for approximately 20 minutes. Remove grain bag and without squeezing, allow liquid to drain back into brew pot. **DO NOT REMOVE HOPS.** Your water is now wort.

4. START BOIL

Bring your wort to a gentle, rolling boil. Add both **3.3 lb. cans of LME, 1 lb. corn sugar and 1 lb. lactose** to the boiling wort⁵. Continuously stir the extract into the wort as it returns to a gentle, rolling boil⁶.

5. FOLLOW BREW DAY SCHEDULE (right)

6. WHIRLPOOL HOP ADDITION

Cool the wort down to 180°F. Slowly stir in three 1 oz. packs of Idaho 7 hops. Allow hops to steep at 180°F for 20 minutes, gently stirring occasionally. After 20 minutes continue on to step 7.

Recommended Brew Day Equipment

- 4 Gallon Brew Pot (or larger)
- 6.5 Gallon Fermenter
- Airlock
- Long Spoon or Paddle
- Hydrometer
- Thermometer
- No-Rinse Sanitizer
- Cleanser

Brew Tips

- ¹We suggest doing a 2.5 gallon boil at minimum. If you have the equipment to boil more than 2.5 gallons feel free to do so. There is no need to change the amount of any of the ingredients.
- ²The grains should not be compacted inside the bag. Grains should steep loosely allowing the hot water to soak into all of the grain evenly.
- ³Pay careful attention not to let your steeping water exceed 170°F which leeches tannins into the wort.
- ⁴When consumed, hops can cause malignant hyperthermia in dogs, sometimes with fatal results. Even small amounts, including "spent" hops from brewing, can trigger a deadly reaction.
- ⁵Run canisters of LME under hot water to allow the extract to pour easier.
- ⁶Pay careful attention that the extract does not accumulate and caramelize on the bottom of your brew pot.

BREW DAY SCHEDULE

1. Set your timer for 60 min. and start ___:___ (time)
2. Boil 60 minutes
3. Terminate boil ___:___ (time)

Total Boil Time: 60 Minutes

Continue to Step #6

~WHIRLPOOL HOP ADDITION~



Recommended Procedures (continued)

7. COOL WORT & TRANSFER

Finish cooling the wort down to approximately 70°F by placing the brew pot in a sink filled with ice water⁷. Pour or siphon the wort into a sanitized fermenter. Avoid transferring the heavy sediment (trub) from the brew pot to the fermenter.

8. ADD WATER

Add enough clean water (approx. 64° - 72°F) to the fermenter to bring your wort to approximately 5 gallons⁸. Thoroughly stir the water into the wort. Using a sanitized hydrometer take an Original Gravity (OG) reading. Once you are satisfied your wort is at the proper volume and within the OG range, record the OG in the ABV% CALCULATOR (right).

9. PITCH YEAST

Sprinkle the contents of the yeast sachet (DO NOT REHYDRATE) over top of the entire wort surface and stir well with sanitized spoon or paddle. Firmly secure the lid onto the fermenter. Fill your airlock halfway with water and gently twist the airlock into the grommated lid. Move the fermenter to a dark, warm, **temperature-stable** area (approx. 64° - 72°F).

FERMENTATION

10. MONITOR, RECORD & TRANSFER

The wort will begin to ferment within 24 - 48 hours and you may notice CO2 releasing (bubbling) out of the airlock⁹. If no bubbling is evident on day two of fermentation, check by taking a gravity reading with a sanitized hydrometer. If gravity has dropped below your OG reading then fermentation is taking place. On day 4 of fermentation take and record a gravity reading. If you practice two-stage fermentation, now is the time to transfer to your secondary fermenter¹⁰. Move to DRY HOPPING (Step 11).

DRY HOPPING

11. ADD DRY HOPS

Add the last 1 oz. pack of Idaho 7 hops after you rack the beer into your secondary fermenter¹¹. Allow the hops to set in secondary for two weeks and then proceed to bottling. If you do not use a secondary fermenter then add the hops to your primary fermenter on day 5 and leave for two weeks before bottling.

BOTTLING DAY (DATE ___ / ___ / ___)

12. READ

Read all of the recommended procedures before you begin.

13. SANITIZE

Thoroughly clean and sanitize ALL brewing equipment, utensils, and bottles that will come in contact with any ingredients, wort or beer with a certified sanitizer, e.g., Star San or IO Star.

14. PREPARE PRIMING SUGAR & FLAVORING

In a small saucepan dissolve 5 oz. of priming sugar into 2 cups of boiling water for 5 minutes. Pour this mixture into a clean bottling bucket. Start adding the tropical blast flavoring. For a light tropical blast flavor add only 2 oz. and for a robust tropical blast flavor, add all 4 oz. of flavoring. Carefully siphon beer from the fermenter to a bottling bucket. Avoid transferring any sediment. Stir gently for about a minute. **1 oz. of priming sugar is equal to approx. 2.5 tablespoons**

15. BOTTLE

Using your siphon setup and bottling wand, fill the bottles¹² to within approximately one inch of the top of the bottle. Use a bottle capper to apply sanitized crown caps.

16. BOTTLE CONDITION

Move the bottles to a dark, warm, **temperature-stable** area (approx. 64° - 72°F). Over the next two weeks the bottles will naturally carbonate. Carbonation times vary depending on the temperature and beer style, so be patient if it takes a week or so longer.

CHILL & ENJOY YOUR TASTY BREW AND THANK YOU FOR CHOOSING BREWER'S BEST® PRODUCTS.

Brew Tips

⁷To avoid bacteria growth do this as rapidly as possible. Do not add ice directly to the wort. Alternatively, you can use a brewing accessory like a Wort Chiller.

⁸Be careful not to add a volume of water that will cause the wort to fall outside of the OG range specified in the BREW STATS.

⁹Within 4 - 6 days the bubbling will slow down until you see no more CO2 being released.

¹⁰Consider transferring your beer to a secondary carboy, see "Two-Stage (Secondary) Fermentation" sidebar below.

¹¹Optionally, you can place the hops in a mesh bag attached to a string. This will allow you to easily remove the hops before siphoning the beer into your bottling bucket.

¹²Use standard crown bottles, preferably amber color. Make sure bottles are thoroughly clean. Use a bottle brush if necessary to remove stubborn deposits. Bottles should be sanitized prior to filling.

Two-Stage (Secondary) Fermentation

Brewer's Best® recommends home brewers employ the practice of a two-stage fermentation. This will allow your finished beer to have more clarity and an overall better, purer flavor. All you need is a 5-gallon carboy, drilled stopper, airlock and siphon setup to transfer the beer. When the fermentation slows, **but before it completes**, simply transfer the beer into the carboy and allow fermentation to finish in the 'secondary'. Leave the beer for about two weeks and then proceed to Bottling Day. Consult your local retailer to learn more about this technique.

(SECONDARY RACK DATE ___ / ___ / ___)

Recommended Bottling Day Equipment

- 6.5 Gallon Bottling Bucket
- Bottle Brush
- Siphon Setup
- Capper
- Bottle Filling Wand
- Sanitizer
- 12 oz. Bottles (approx. 53)
- Crown Caps

ABV% Calculator

(OG - FG) x 131.25 = ABV%

(_____* - _____**) x 131.25 = ____%

*OG from Step #8

**FG from Step #10



BREWER'S
EST. **BEST** 1992

Brewer's Best is a registered trademark of the LD Carlson Co.