KEC CONNECTION

Home Brew Kit Instructions for:

Munich Helles

(All Grain Version)

Our Munich Helles is a clean, malty, gold colored lager with a dry finish. Slightly sweet with hints of spicy, floral, and herb notes. A refreshing lager that can be enjoyed anytime. 1.045SG 1.010FG 5% ABV, 4 SRM, 20 IBU

Kit Contents and hop boil Schedule:

Fermentables

9.5 lbs Pilsnen Malt ¹/₄ lbs Melanoidin Malt ¹ lb Munich Malt

Hops

Amount:Variety:Boil time:USE½ ozSaaz60 minutesBittering1 ozSaaz30 minutesAroma

Yeast

FermentisSafAle™ US-05 or WhiteLabs WLP001, Wyeast 1084

Instructions:

SANITIZE

Clean all of your brewing equipment with a cleaner such as "Brew Clean" and then Sterilize with a certified sterilizer such as "Star San". With Star San you will not need to rinse.

Mashing GRAINS

Mash in 4.5 Gallons of water with a target ot 150 degrees for 60 minutes. Mash out with 2 gallons of 168 degree water for 10 minutes . Sparge slowly with 170 degree water collecting 6 gallons of wort.

START BOIL

Bring your wort to a gentle, rolling boil.

Brewing Schedule:

- Set Timer for 60 Minutes and keep water boiling at a gentle rolling boil.
- Add your first hops (as scheduled above for 60 minutes)
- After 30 minutes you will want to add your 1st flavor hop (if there is one in schedule)
- After 40 minutes add the 2nd half of your malt extract.
- After 45 Minutes you will want to add second flavor hop (if there is one in schedule)

- * Optional After 50 Minutes you should add your Whirl flow tablet (or other clarifying agent) and your yeast nutrient. These are optional and you should consult the instructions on the packages to confirm this is the proper time to add!
- After 55 minutes add your aroma hops.
- At 60 minutes you are done and you can remove the pot from the heat source.

After Brewing:

- Cool down your wort to around 70°F using a wort chiller or ice bath in your sink. The faster you cool down the wort the better. If you are using a wort chiller and your water is too warm to reach 70°F you can finish with an ice bath.
- Sanitize primary fermenter, lid, cork, air lock, aeration stone/hose, funnel, wine thief and any other items that will touch your wort!
- Top off fermenter with water to desired batch size and take an original gravity reading with your sterilized hydrometer.
- Aerate wort by shaking, rocking, splashing, or with aeration stone.
- Pitch yeast per manufactures directions.
- Fit with airlock and/or blow off tube for high gravity or dark beers.
- After seven days, rack to secondary fermenter. Secondary fermentation should take approx. 7 days. Let beer clarify under refrigeration for 2 weeks then keg or bottle as usual.

ABV (alcohol by	y volume`	Calculator:	(OG	minus FG) x 131.25 = Alcohol %

Bottling or Kegging?

You can either bottle or keg your brew when completed. If you are kegging please instructions on our website: www.kegconnection.com. If you are bottling you will need to add about 5 oz. of priming sugar to bottling bucket (or carbonating tablets directly in bottles) and bottle your beer. Bottling beer adds a couple weeks of wait time. If you force carbonate in a keg you can drink the beer

BOTTLE:

Using your siphon setup and bottling wand, fill the bottles 10 to within approximately one inch of the top of the bottle. Use a bottle capper to apply sanitized crown caps.

Kegging: See videos and written instructions on Kegconnection.com. Includes transferring, kegging and force Carbonating!