SESSION PALE ALE

STYLE: Pale Ale

TASTING NOTES:

This light-bodied pale ale pours a clear golden colour with hints of amber. The aroma features bright citrus and tropical notes from the combination of Citra, Mosaic, and Simcoe dry hops, similar to modern session IPAs. The German Northern Brewer hops provide a clean bitterness that balances the malt character. Despite its low alcohol content, the body is enhanced by the addition of Carapils and Chit Barley. Expect flavours of citrus, pine, and subtle berry notes from the hop blend, making it a refreshing and flavourful beer that drinks like a regular pale ale but with less alcohol.

SPECIFICATIONS:

OG	1.027	**Boil Time**	60 Mins
FG	1.007	**Batch Size**	23 L
IBU	25.2	**Brew Day Duration**	4-6 Hours
Colour	9.5 EBC – Gold	**ABV**	2.7%%
Mash Efficiency	80%	**Fermentation time**	13 Days
Mash Time	60 Mins + 10 Min. Mash out	**Fermentation Temp**	18-20°C (optional cold crash at 4)°C
Mash Temp	69°C	**Bottling/Kegging Volume**	21 L

CHECKLIST BEFORE YOU START:

INGREDIENTS:

☐ 3.2 kg Grains 1 bag

☐ Yeast 2x 10 g packs

☐ Hops 4x 50 g bags

☐ Carbonation drops or bottling sugar if bottling (not included)

☐ Calculate water volumes as below if not using a brewing app.

Free Grainfather App

1. Pre-Boil Volume	2. Mash Volume:	3. Sparge Volume
Batch Volume(23L) + Boil Losses + (Boil Length * Boil off rate) = Preboil Volume	Grain weight * Mash thickness + Mash tun dead space = Mash Volume	Pre-boil volume – Mash water + (grain weight * grain absorption) = Sparge Volume

Your Brew system manufacturer should have specifications for boiler loss, boil-off rate, mash tun dead space and recommended mash thickness. We recommend using a grain absorption rate of 0.8 L/kg

EQUIPMENT:

☐ All Grain brewing system, e.g. Grainfather G30

☐ Counterflow/immersion chiller

☐ Sparge water heater

☐ Mash paddle

☐ Hydrometer/refractometer

☐ Hot water safe jug >1 L

☐ 30 L Sanitised Fermenter & Airlock with Temp control

☐ Kegging/botting equipment

BREW AREA:

☐ Access to water

☐ Access to drainage

☐ Access to power

FERMENTATION AREA:

☐ Stable day-night temperatures

☐ Fermenter can remain unmoved

BREW DAY:

SET UP & MASH:

☐ Set up your brewing system and ensure it is clean.

☐ Make sure all valves are closed on your brewing system.

☐ If using a single vessel brewing system like the Grainfather G30, fill it with mash water and heat to 69°C. Alternatively, fill your Hot Liquor Tank (HLT) with the total water volume and heat to 69°C.

☐ When the mash water is at the correct temperature, add the grains to the mash basket and stir with a mash paddle until the consistency resembles that of porridge.

☐ If your brewing system has a pump, set up recirculation and allow the brewing system to maintain the mash temperature while recirculating for **60 mins**.

☐ Set up the sparge water heater, fill it with the sparge water volume, and heat it to 75°C. Or raise the temperature of your HLT to 75°C.

☐ At the end of the 60 min mash, raise the temperature of the mash to 75°C and let it rest for **10 mins**.

SPARGE & BOIL:

☐ If using a single Vessel brew system like Grainfather **G**30 raise the mash basket. Otherwise, Vorlauf (drain mash tun until runnings are clear and pour back into mash tun), then drain first runnings into the kettle.

☐ Slowly add sparge water to the grains and allow to drain into the boiler.

☐ Start heating to near boil (98°C).

☐ Remove grain basket.

☐ Record pre-boil gravity_____ & preboil volume _____.

☐ Bring the kettle to a boil, stirring the surface gently to avoid a boil over.

☐ Start a timer when the boil starts.

☐ Add the 30 min hop addition (30 mins into the boil) – 25 g (1/2 bag) of Northern Brewer (German) hops.

☐ Clean mash basket/mash tun

☐ With 10 minutes left, set up and submerge your immersion chiller in the boiler. Or set up your counter-flow chiller.

☐ Add 5 min Hop Addition (55 mins into the boil) – 25 g (1/2 bag) of Northern Brewer (German) hops.

☐ Ensure your fermenter is cleaned and sanitised.

COOLING & TRANSFERRING:

☐ Cool the wort to yeast pitching temperature with an immersion chiller, or cool and transfer to your clean and sanitised fermenter using a counterflow chiller.

Record Original Gravity (OG)_____ & amount in the fermenter_____.

FERMENTATION/BREW DAY WRAP UP:

☐ Ensure the wort is at the correct yeast pitching temperature, then add the yeast.

☐ Fit the fermenter lid, bung, and airlock, or blow off tube.

☐ Move the fermenter to an area with a stable temperature of 18-20°C, or where you have fermentation temperature control. Ensure the fermenter can remain unmoved for 13 Days.

☐ Clean your brewing system.

☐ Ferment between 18-20°C for 2 days. If possible, raise the temperature of the fermenter to 20°C at the end of the 2 days. Leave to ferment at this temperature for a further 8 days.

☐ After the 8 days, if possible, drop the temperature of the fermenter down to 4°C. If not, allow the fermenter to return to about 18°C. Add the dry hops and rest for 3 days.

KEGGING:

☐ Move the fermenter up onto a table or countertop, and let the sediment settle.

☐ Sanitise the keg and any transfer hoses/fittings.

☐ Rack/transfer the beer straight into the keg. Save a hydrometer sample and a sample for tasting.

☐ Force carbonate, or, if using priming sugar to "keg condition", dissolve it in boiled water and let it cool before adding it to the keg and swirling it to mix.

☐ Record the final gravity: _____ & keg volume_____.

☐ Clean the fermenter and kegging equipment.

BOTTLING:

☐ Determine how many and what type of bottles you'd like to use. Ensure you have caps and a capper if using crown tops.

☐ Move the fermenter up onto a table or countertop and let the sediment settle.

☐ Sanitise the bottles and caps.

☐ Sanitize your filling equipment, e.g. racking cane, transfer hoses, bottling wand, bottling bucket and spoon.

☐ If using priming sugar dissolve it in boiled water and let it cool.

☐ Carefully rack the beer into the bottling bucket. Save a hydrometer sample and a sample for tasting.

☐ Add the priming sugar solution and mix gently – avoid splashing.

☐ Syphon/transfer the beer into bottles, leaving approximately 5 cm of head space.

☐ If using carbonation drops, add the appropriate number of drops per bottle.

☐ Cap and label the bottles.

☐ Record final gravity: _____ & number of bottles_____.

☐ Clean bottling equipment.

ENJOY!:

☐ Wait approximately 2 weeks and give your beer a taste; note the carbonation levels and flavour profile. If no 4°C fermentation step was done and you bottled your beer, try to store the bottles in a place where the temperature is less than 10°C for a further 2-3 weeks before consuming.

☐ Plan your next brew!