

# PPPP

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **19**
- SRM **3.9**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount     | Yield | EBC |
|-------|-----------------------------|------------|-------|-----|
| Grain | Weyermann - Pilsner Malt    | 2 kg (40%) | 81 %  | 5   |
| Grain | Weyermann - Pale Wheat Malt | 3 kg (60%) | 85 %  | 5   |

## Hops

| Use for             | Name                | Amount | Time   | Alpha acid |
|---------------------|---------------------|--------|--------|------------|
| Boil                | Hallertau Tradition | 30 g   | 60 min | 5 %        |
| Aroma (end of boil) | Hallertau Tradition | 20 g   | 10 min | 5 %        |

## Yeasts

| Name                                       | Type  | Form | Amount | Laboratory |
|--|-------|------|--------|------------|
| Lallemand - LalBrew German Wheat-Sytle Ale | Wheat | Dry  | 11 g   | Lallemand  |

## Notes

- Łuska ryżowa sterylizowana - 200 g - do filtracji  
*Jan 30, 2022, 9:19 AM*