

Hazy PA - Hallertau Blanc

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **46**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **16.6 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.3 liter(s)**

Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **8.8 liter(s)** of strike water to **72.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1 kg (38.8%) | 80 % | 5 |
| Grain | Strzegom Pilzniejszy | 0.5 kg (19.4%) | 80 % | 4 |
| Grain | Wheat Malt, Dark | 0.5 kg (19.4%) | 80 % | 18 |
| Grain | Oats, Flaked | 0.4 kg (15.5%) | 80 % | 2 |
| Grain | Carahell | 0.125 kg (4.9%) | 77 % | 26 |
| Grain | Weyermann - Acidulated Malt | 0.05 kg (1.9%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------|--------|----------|------------|
| Boil | Summit | 10 g | 60 min | 14.3 % |
| Boil | Hallertau Blanc | 20 g | 15 min | 9 % |
| Aroma (end of boil) | Hallertau Blanc | 20 g | 0 min | 9 % |
| Dry Hop | Hallertau Blanc | 60 g | 3 day(s) | 9 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 100 ml | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|----------|--------|
| Water Agent | gips piwowarski | 2 g | Mash | 60 min |
| Water Agent | Witamina C | 2 g | Bottling | --- |