

pale ale

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **45**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 4 kg (95.2%) | 85 % | 7 |
| Grain | Caramel/Crystal Malt - 10L | 0.2 kg (4.8%) | 75 % | 20 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Horizon | 20 g | 60 min | 14 % |
| Aroma (end of boil) | Horizon | 10 g | 10 min | 14 % |
| Aroma (end of boil) | Summit | 10 g | 10 min | 17 % |
| Whirlpool | Summit | 20 g | 0 min | 17 % |
| Whirlpool | Nugget | 10 g | 0 min | 13 % |
| Whirlpool | Ekuanot | 10 g | 0 min | 14 % |
| Dry Hop | Nugget | 20 g | 3 day(s) | 13 % |
| Dry Hop | Ekuanot | 20 g | 3 day(s) | 14 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |