

## G Pale Ale #kveik

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **40**
- SRM **4.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11.3 liter(s)**

### Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **15 min**

### Mash step by step

- Heat up **8.8 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **15 min** at **77C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

### Fermentables

| Type  | Name                                      | Amount       | Yield | EBC |
|-------|---|--------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt                 | 1.8 kg (72%) | 85 %  | 7   |
| Grain | Słód Pilsner®<br>2,5-4,5 EBC<br>Weyermann | 0.6 kg (24%) | 80 %  | 4   |
| Grain | Weyermann - Carapils                      | 0.1 kg (4%)  | 78 %  | 4   |

### Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Mandarina Bavaria | 15 g   | 50 min | 10 %       |
| Boil                | Mandarina Bavaria | 15 g   | 10 min | 10 %       |
| Aroma (end of boil) | Mandarina Bavaria | 20 g   | 1 min  | 10 %       |

### Yeasts

| Name            | Type | Form   | Amount | Laboratory |
|-----------------|------|--------|--------|------------|
| FM53 Voss kveik | Ale  | Liquid | 120 ml | FM         |

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 2.4 g  | Mash    | 10 min |