

10# powrót do korzeni

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **29**
- SRM **3.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (100%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Cascade | 10 g | 60 min | 6 % |
| Boil | Mosaic | 10 g | 60 min | 11.8 % |
| Boil | Cascade | 10 g | 15 min | 6 % |
| Boil | Mosaic | 10 g | 15 min | 11.8 % |
| Boil | Cascade | 10 g | 3 min | 6 % |
| Boil | Mosaic | 10 g | 3 min | 11.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|------|------|--------|------------|
| US West Coast | Ale | Dry | 10 g | Gozdawa |