

The Dubler

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.5 kg (79.5%) | 79 % | 6 |
| Grain | Płatki owsiane | 0.6 kg (13.6%) | 85 % | 3 |
| Grain | Strzegom Monachijski typ I | 0.3 kg (6.8%) | 79 % | 12 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 10 g | 60 min | 15.5 % |
| Whirlpool | Cascade | 25 g | 0 min | 6 % |
| Whirlpool | Citra | 25 g | 0 min | 12 % |
| Dry Hop | Equinox | 35 g | 7 day(s) | 13.1 % |
| Dry Hop | Cascade | 20 g | 7 day(s) | 6 % |
| Dry Hop | Citra | 10 g | 7 day(s) | 12 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------|--------|--------|----------|------|
| Other | cukier | 105 g | Bottling | --- |