

ABW

- Gravity **24.4 BLG**
- ABV **11.3 %**
- IBU **87**
- SRM **9.9**
- Style **American Barleywine**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **15 %/h**
- Boil size **30.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **22 liter(s)**
- Total mash volume **29.8 liter(s)**

Steps

- Temp **65 C**, Time **70 min**

Mash step by step

- Heat up **22 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **70 min** at **65C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|-------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.3 kg (45%) | 80 % | 5 |
| Grain | Caraamber | 0.25 kg (2.6%) | 75 % | 59 |
| Grain | Weyermann - Carapils | 0.5 kg (5.2%) | 78 % | 4 |
| Grain | Karmelowy Jasny 30EBC | 0.3 kg (3.1%) | 75 % | 30 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.3 kg (3.1%) | 79 % | 130 |
| Grain | Strzegom Monachijski typ I | 1 kg (10.5%) | 79 % | 16 |
| Grain | Pszeniczny | 0.2 kg (2.1%) | 85 % | 4 |
| Grain | Strzegom Wiedeński | 1 kg (10.5%) | 79 % | 10 |
| Liquid Extract | WES ekstrakt słodowy jasny | 1.7 kg (17.8%) | 80 % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil | Pacific Gem | 20 g | 60 min | 15.3 % |
| Boil | Amarillo | 20 g | 60 min | 8.6 % |
| Boil | Pacific Gem | 10 g | 45 min | 15.3 % |
| Boil | Amarillo | 10 g | 45 min | 8.6 % |

| | | | | |
|------|----------|------|--------|-------|
| Boil | Amarillo | 70 g | 30 min | 8.6 % |
| Boil | Cascade | 54 g | 15 min | 7.1 % |
| Boil | Cascade | 26 g | 1 min | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale | Slant | 200 ml | Danstar |