

#11 Barley Wine

- Gravity **23.3 BLG**
- ABV **10.7 %**
- IBU **87**
- SRM **10.4**
- Style **American Barleywine**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **180 min**
- Evaporation rate **10 %/h**
- Boil size **28.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **67 C**, Time **60 min**
- Temp **74 C**, Time **30 min**

Mash step by step

- Heat up **30 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **60 min** at **67C**
- Keep mash **30 min** at **74C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|--------------|-------|-----|
| Grain | Słodownia Strzegom - pale ale | 8.7 kg (87%) | 79 % | 6 |
| Grain | Słodownia Strzegom - wiedeński | 1 kg (10%) | 79 % | 7 |
| Grain | Castle Malting - Chateau - Crystal 150 EBC | 0.3 kg (3%) | 78 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Cascade | 50 g | 0 min | 6.8 % |
| Boil | Chinook | 50 g | 60 min | 12.8 % |
| Boil | Amarillo | 50 g | 10 min | 8.8 % |
| Boil | Centennial | 50 g | 30 min | 9.4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|------|--------|--------|------------------|
| FM52 - Amerykański Sen | Ale | Liquid | 300 ml | Fermentum Mobile |