

A B W

- Gravity **24.1 BLG**
- ABV ---
- IBU **109**
- SRM **16.8**
- Style **American Barleywine**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **100 min**
- Evaporation rate **10 %/h**
- Boil size **30.8 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|----------------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 4.3 kg (44.8%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 2 kg (20.8%) | 79 % | 16 |
| Grain | Weyermann - Carapils | 0.5 kg (5.2%) | 78 % | 4 |
| Grain | Strzegom Karmel 150 | 0.3 kg (3.1%) | 75 % | 150 |
| Grain | Weyermann - Carawheat | 0.3 kg (3.1%) | 77 % | 97 |
| Grain | Weyermann - Caraamber | 0.25 kg (2.6%) | 75 % | 65 |
| Grain | Strzegom pszeniczny | 0.25 kg (2.6%) | 81 % | 6 |
| Liquid Extract | WES ekstrakt słodowy jasny | 1.7 kg (17.7%) | 80 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil | Pacific Gem | 32 g | 70 min | 15.3 % |
| Boil | Amarillo | 50 g | 60 min | 9.5 % |
| Boil | Amarillo | 50 g | 50 min | 9.5 % |
| Boil | Cascade | 54 g | 25 min | 6 % |

| | | | | |
|-----------|---------|------|-------|-----|
| Whirlpool | Cascade | 26 g | 0 min | 6 % |
|-----------|---------|------|-------|-----|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------------|------|--------|--------|------------|
| WLP099 - Super High Gravity Ale Yeast | Ale | Liquid | 35 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------|--------|---------|--------|
| Fining | MECH | 10 g | Boil | 10 min |