

ABAle

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **34**
- SRM **22.2**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **31.6 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **64 C**, Time **35 min**
- Temp **72 C**, Time **35 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **23 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **35 min** at **64C**
- Keep mash **35 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Strzegom Wiedeński | 2.5 kg (32.7%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ II | 2 kg (26.1%) | 79 % | 22 |
| Grain | Pilzneński | 1.9 kg (24.8%) | 81 % | 4 |
| Grain | Pszeniczny | 0.9 kg (11.8%) | 85 % | 4 |
| Grain | Weyermann - Carafa I | 0.25 kg (3.3%) | 70 % | 900 |
| Grain | Black (Patent) Malt | 0.1 kg (1.3%) | 55 % | 1350 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil | Amarillo | 10 g | 60 min | 9.5 % |
| Boil | Sorachi Ace | 10 g | 60 min | 10 % |
| Aroma (end of boil) | Amarillo | 20 g | 15 min | 9.5 % |
| Aroma (end of boil) | Sorachi Ace | 20 g | 15 min | 10 % |
| Whirlpool | Motueka | 10 g | 5 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 30 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 15 min |