

Brown Ale (24)

- Gravity **14 BLG**
- ABV ---
- IBU **82**
- SRM **23.6**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **31.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.8 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 1.5 kg (23.1%) | 79 % | 6 |
| Grain | Strzegom Monachijski typ I | 3 kg (46.2%) | 79 % | 16 |
| Grain | Strzegom Karmel 150 | 1.5 kg (23.1%) | 75 % | 150 |
| Grain | Strzegom Pszeniczny | 0.5 kg (7.7%) | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 50 g | 60 min | 15.5 % |
| Boil | Cascade | 50 g | 10 min | 6 % |
| Dry Hop | Citra | 50 g | 6 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 200 ml | --- |