

American Brown Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **27**
- SRM **20.3**
- Style **American Brown Ale**

Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.1 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **23.1 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **75C**
- Sparge using **21.9 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 6 kg (85.7%) | 80 % | 5 |
| Grain | Strzegom Karmel 150 | 0.3 kg (4.3%) | 75 % | 150 |
| Grain | Strzegom Karmel 300 | 0.3 kg (4.3%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy jasny | 0.2 kg (2.9%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.9%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 60 min | 15.5 % |
| Boil | Cascade | 20 g | 30 min | 7.2 % |
| Boil | Cascade | 20 g | 5 min | 7.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------|------|--------|--------|------------------|
| FM50 Kłosy Kansas | Ale | Liquid | 400 ml | Fermentum Mobile |