

abc

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **5.3**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (69.2%) | 80 % | 5 |
| Grain | Strzegom Wiedeński | 1 kg (15.4%) | 79 % | 10 |
| Grain | Monachijski | 1 kg (15.4%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 25 g | 20 min | 15.5 % |
| Whirlpool | Columbus/Tomahawk/Zeus | 25 g | 5 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|--------|--------|------------|
| Lutra | Ale | Liquid | 100 ml | aaa |