

Ciemniuch

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **24**
- SRM **26**
- Style **Dark American Lager**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **35 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11.1 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **30 min** at **65C**
- Keep mash **35 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|---------------|-------|-----|
| Grain | Viking Pilsner malt | 3 kg (81.1%) | 82 % | 4 |
| Grain | Carafa II | 0.2 kg (5.4%) | 70 % | 812 |
| Grain | Viking Czekoladowy jasny | 0.2 kg (5.4%) | 68 % | 350 |
| Grain | Castlemalting Chateau Special B | 0.2 kg (5.4%) | 70 % | 260 |
| Grain | Viking Cookie malt | 0.1 kg (2.7%) | 70 % | 60 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Perle | 10 g | 60 min | 6.7 % |
| Boil | Perle | 20 g | 20 min | 6.7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 11.5 g | Fermentis |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 1 g | Boil | 10 min |