

Klon ksiazecze Ciemne lagodne

- Gravity **12.9 BLG**
- ABV ---
- IBU **24**
- SRM **31.7**
- Style **Schwarzbier**

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 **82 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **30 min** at **72C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Monachijski typ II | 2 kg (33.3%) | 79 % | 22 |
| Grain | Pilzneński | 3 kg (50%) | 81 % | 4 |
| Grain | Strzegom Karmel 300 | 0.5 kg (8.3%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy 1200 | 0.4 kg (6.7%) | 68 % | 1202 |
| Grain | Jęczmień palony | 0.1 kg (1.7%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 25 g | 60 min | 10 % |
| Boil | Marynka | 15 g | 5 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|-------|--------|------------|
| Saflager W 34/70 | Lager | Slant | 500 ml | Fermentis |