Schwarzbier (ciemny lager)

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **24**
- SRM **24.1**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **32.3 liter(s)**
- Total mash volume **42.1 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **32.3 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **1 min** at **77C**
- Sparge using **28.1 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	9 kg *(91.8%)*	81 %	4
Grain	Fawcett - Pszeniczny Czekoladowy	0.8 kg *(8.2%)*	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	25 g	60 min	10 %
Boil	Premiant	20 g	60 min	8.5 %
Boil	East Kent Goldings	20 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	46 g	Fermentis