

# Mocny Schwarzbier

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **30**
- SRM **39.5**
- Style **Schwarzbier**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **10.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.4 kg (67.6%)	80 %	4
Grain	Strzegom Karmel 80	0.2 kg (5.6%)	75 %	80
Grain	Pszeniczny	0.5 kg (14.1%)	85 %	4
Grain	Strzegom Barwiący	0.25 kg (7%)	68 %	1200
Grain	Extra black	0.1 kg (2.8%)	65 %	1400
Grain	kawowy - Castle Malting	0.1 kg (2.8%)	78 %	500

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Vic Secret	10 g	60 min	16.3 %
Boil	Lublin (Lubelski)	16 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	150 ml	Fermentis
Safale US-05	Ale	Dry	11.5 g	Fermentis