

# Koźlak Dubeltowy

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **25**
- SRM **15.3**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **30 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	5 kg (50%)	79 %	16
Grain	Strzegom Wiedeński	3 kg (30%)	79 %	10
Grain	Strzegom Monachijski typ II	1 kg (10%)	79 %	22
Grain	Weyermann - Caraamber	0.25 kg (2.5%)	75 %	65
Grain	Weyermann - Melanoiden Malt	0.25 kg (2.5%)	81 %	53
Grain	Carared	0.25 kg (2.5%)	75 %	45
Grain	Caraaroma	0.25 kg (2.5%)	78 %	350

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	50 g	60 min	6 %
Aroma (end of boil)	Książęcy	30 g	10 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	23 g	Fermentis