

# Koźlak Dubeltowy

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **13**
- SRM **11.2**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **33.2 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **24.9 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (36.1%)	81 %	4
Grain	Strzegom Monachijski typ I	5 kg (60.2%)	79 %	16
Grain	Strzegom Monachijski typ II	0.2 kg (2.4%)	79 %	22
Grain	Strzegom Karmel 300	0.1 kg (1.2%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	100 ml	Fermentum Mobile

## Notes

- Zacieranie Dekokcyjne:  
65 stopni - 30 min  
Odlano 1/3  
1/3 100 stopni - 20 min

2/3 65 stopni - 30 min  
72 stopnie - 30 min  
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