

# Koźlak Dubeltowy

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **26**
- SRM **15.5**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.8 liter(s)**
- Total mash volume **38.4 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **28.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **11.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (31.3%)	80 %	4
Grain	Strzegom Monachijski typ II	4 kg (41.7%)	79 %	22
Grain	Strzegom Wiedeński	2 kg (20.8%)	79 %	10
Grain	Carabelge	0.2 kg (2.1%)	80 %	30
Grain	Special W	0.2 kg (2.1%)	75 %	280
Grain	Special X	0.2 kg (2.1%)	75 %	300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	70 min	8.5 %
Boil	Lublin (Lubelski)	20 g	35 min	3.8 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	0 min	3.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	23 g	Fermentis

## Notes

- Zacieranie dekokcyjne. Odbiór 1/3 zacieru (dekoktu) w przerwie maltozowej po 10 min. Podgrzanie zacieru do 72 st. - przetrzymanie 5 min, następnie zagotowanie i zwrócenie. Ustanowienie tem. na 72 st.  
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