

# Kozlak HB 20l

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **29**
- SRM **18.6**
- Style **Traditional Bock**

## 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 **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

## Steps

- Temp **63 C**, Time **40 min**
- Temp **73 C**, Time **20 min**

## Mash step by step

- Heat up **23.8 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **73C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	4 kg (58.8%)	79 %	22
Grain	Strzegom Pilzneński	1 kg (14.7%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (14.7%)	79 %	10
Grain	Strzegom Karmel 150	0.2 kg (2.9%)	75 %	150
Grain	Strzegom Karmel 600	0.2 kg (2.9%)	68 %	601
Grain	Wayerman Melonoidynowy	0.4 kg (5.9%)	75 %	70

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	30 min	13.5 %

## Yeasts

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