

## Kozlak #3

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- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **30**
- SRM **12.7**
- Style **Doppelbock**

### Batch size

- Expected quantity of finished beer **170 liter(s)**
- Trub loss **5 %**
- Size with trub loss **178.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **206.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **153.8 liter(s)**
- Total mash volume **215.3 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	25 kg (37.6%)	80 %	16
Grain	Viking Pale Ale malt	25 kg (37.6%)	80 %	5
Grain	Pszeniczny	5 kg (7.5%)	85 %	4
Grain	Strzegom Czekoladowy ciemny	0.5 kg (0.8%)	68 %	1200
Sugar	cukier	5 kg (7.5%)	100 %	0
Grain	Karmelowy Jasny 30EBC	6 kg (9%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	300 g	60 min	7.8 %
Boil	Marynka	100 g	30 min	7.8 %
Boil	marynka	100 g	5 min	7.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	3000 ml	Fermentis