

# Stout dr Kobak

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **58**
- SRM **27.7**
- Style **Dry Stout**

## 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 **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (72.7%)	81 %	4
Grain	Monachijski	0.4 kg (7.3%)	80 %	16
Grain	Pszeniczny	0.25 kg (4.5%)	85 %	4
Grain	Strzegom pszenica prażona	0.25 kg (4.5%)	70 %	1000
Grain	Słód Wędzony Steinbach	0.2 kg (3.6%)	80 %	5
Grain	Czekoladowy	0.2 kg (3.6%)	60 %	788
Grain	Caraaroma	0.2 kg (3.6%)	78 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	35 g	10 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM13 Irlandzkie Ciemności	Ale	Liquid	50 ml	---
Safale S-04	Ale	Dry	11.5 g	Safale

## Notes

- zacieranie +0.25 kg czekoladowy na ost 10 min  
drozdze sefale dodane po 12 h  
*Nov 21, 2020, 10:01 PM*