

# 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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                              |     |        |        |        |
|------------------------------|-----|--------|--------|--------|
| FM13 Irlandzkie<br>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*