

## #01 - Dry stout kawowo-czekoladowy

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **25**
- SRM **35.3**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (75.8%)	79 %	6
Grain	Płatki jęczmienne	0.5 kg (7.6%)	75 %	2
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3%)	68 %	1200
Grain	Castle Cafe	0.2 kg (3%)	75.5 %	480
Grain	Strzegom Karmel 300	0.2 kg (3%)	70 %	299
Grain	Jęczmień palony	0.5 kg (7.6%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	35 g	30 min	4.5 %
Boil	Fuggles	35 g	30 min	4.5 %
Boil	Fuggles	30 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	12.5 g	Fermentis

## Notes

- pale ale i płatki od początku zacierania, czekolada karmel i cafe po 15 minutach, jęczmień palony na ostatnie 15 minut  
*Nov 4, 2021, 10:21 AM*