

## Ciemne z dodatkami

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- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **26**
- SRM **26.1**
- Style **Spice, Herb, or Vegetable Beer**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **14.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

### Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **9.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1.7 kg (53.1%)	82 %	4
Grain	Wędzony bukiem Viking Malt	0.3 kg (9.4%)	82 %	10
Grain	Viking Malt Wędzony Jabłonią	0.3 kg (9.4%)	82 %	10
Grain	Viking - Caramel Rye Malt	0.3 kg (9.4%)	74 %	175
Grain	Viking Karmel 150	0.3 kg (9.4%)	75 %	150
Grain	Castle Cafe light	0.3 kg (9.4%)	75.5 %	480

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Comet	10 g	60 min	8.3 %
Boil	Comet	5 g	20 min	8.3 %
Boil	Chmiel fantasia	8 g	20 min	4.2 %
Boil	Chmiel fantasia	8 g	11 min	4.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon	20 g	Boil	20 min
Flavor	Śliwka suszona	20 g	Boil	20 min