

# Chocolate orange stout

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **34**
- SRM **35.5**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (41.7%)	80 %	5
Grain	Monachijski	1 kg (27.8%)	80 %	16
Grain	Pszeniczny	0.4 kg (11.1%)	85 %	4
Grain	Caraaroma	0.4 kg (11.1%)	78 %	400
Grain	Czekoladowy	0.15 kg (4.2%)	60 %	788
Grain	Carafa III	0.15 kg (4.2%)	70 %	1034

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Mandarina Bavaria	30 g	0 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Suszona skorka pomaranczy	20 g	Boil	5 min
Other	Łuska kakaowca	20 g	Boil	5 min