

# stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **35**
- SRM **32.9**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	3 kg (51.7%)	81 %	6
Grain	Caraaroma	0.75 kg (12.9%)	78 %	400
Grain	Weyermann - Caramel Rye Malt	0.25 kg (4.3%)	74 %	175
Grain	Weyermann - Dark Wheat Malt	0.25 kg (4.3%)	85 %	14
Grain	Caramunich® typ I	0.25 kg (4.3%)	73 %	80
Grain	Carafa II	0.5 kg (8.6%)	70 %	812
Grain	Platki owsiane	0.8 kg (13.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	15 g	60 min	6 %
Boil	wa-ka-tu	5 g	60 min	7.9 %
Boil	wa-ka-tu	15 g	45 min	7.9 %
Boil	Cascade	5 g	30 min	6 %
Boil	Fuggles	20 g	30 min	4.5 %
Boil	wa-ka-tu	5 g	15 min	7.9 %
Boil	WAI-ITI	15 g	15 min	4.1 %
Whirlpool	WAI-ITI	10 g	0 min	4.1 %
Whirlpool	Fuggles	5 g	0 min	4.5 %
Whirlpool	Cascade	5 g	0 min	6 %