

# Christmas stout

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU ---
- SRM **27.9**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **15 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **19.1 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (33.9%)	80 %	5
Grain	Pilznieński	2 kg (33.9%)	81 %	4
Grain	Strzegom Czekoladowy jasny	0.5 kg (8.5%)	68 %	400
Grain	Carafa III	0.1 kg (1.7%)	70 %	1034
Grain	Special W	0.5 kg (8.5%)	72 %	79
Grain	Płatki owsiane	0.5 kg (8.5%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.3 kg (5.1%)	76.1 %	0

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Masa makowa	1800 g	Boil	10 min
Spice	Cynamon	15 g	Boil	15 min
Spice	Kakao	40 g	Mash	30 min