

Christmas Stout #1

- Gravity **23.3 BLG**
- ABV **10.7 %**
- IBU **15**
- SRM **74.7**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (61.5%)	70 %	5
Grain	Słód Caramunich Typ II Weyermann	0.5 kg (7.7%)	70 %	120
Grain	Weyermann - Carared	0.5 kg (7.7%)	70 %	45
Grain	Carafa III	1 kg (15.4%)	20 %	1300
Liquid Extract	Miód Gryczany (Buckwheat Honey)	0.5 kg (7.7%)	70 %	40

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	4.5 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Spice	Goździki	5 g	Boil	10 min
Spice	Cynamon	15 g	Boil	10 min
Spice	Przyprawa do piernika	15 g	Boil	10 min
Spice	Tonka	10 g	Secondary	5 day(s)
Flavor	Skórka pomarańczy	50 g	Secondary	5 day(s)