

## Sweet stout

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **34**
- SRM **29.1**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **22.4 liter(s)**

### Steps

- Temp **64 C**, Time **30 min**
- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **17.3 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	2 kg (37.7%)	80 %	5
Grain	Pszeniczny	1 kg (18.9%)	82 %	4
Grain	Wiedeński	1 kg (18.9%)	79 %	8
Grain	Monachijski typ II	0.5 kg (9.4%)	79 %	22
Grain	Cookie Viking Malt	0.3 kg (5.7%)	75 %	50
Grain	Prażona pszenica IREKS	0.3 kg (5.7%)	--- %	1600
Sugar	cukier	0.2 kg (3.8%)	100 %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Equinox	15 g	60 min	16.1 %
Aroma (end of boil)	Citra	20 g	5 min	13.3 %
Aroma (end of boil)	Equinox	10 g	5 min	16.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Danstar - Nottingham	Ale	Slant	300 ml	---
----------------------	-----	-------	--------	-----

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Chlorek wapnia 33%	5 g	Mash	70 min
Water Agent	Węglan wapnia	5 g	Mash	70 min
Fining	Whirlfloc T	1 g	Boil	5 min
Other	Laktoza	400 g	Boil	10 min