

## #25 Sweet stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **28**
- SRM **39.9**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **20.2 liter(s)**

### Steps

- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **15.2 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.7 kg (73.3%)	80 %	5
Grain	Strzegom Karmel 600	0.4 kg (7.9%)	68 %	601
Grain	Jęczmień palony	0.2 kg (4%)	55 %	985
Grain	Jęczmień niesłodowany - płatki	0.4 kg (7.9%)	50 %	2
Grain	Strzegom Czekoladowy ciemny	0.35 kg (6.9%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	7 g	60 min	11.5 %
Boil	Cluster	25 g	20 min	8.6 %
Aroma (end of boil)	Cluster	15 g	10 min	7.75 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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WLP099 - Super High Gravity Ale Yeast	Ale	Liquid	50 ml	Whitelabs
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### Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	500 g	Bottling	15 min

### Notes

- Starter WLP099, 1 litr. Laktoza do rozlewu.  
*Sep 20, 2019, 12:04 PM*