

# Mint Sweet Stout #1 - Browar na Wyżynie

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **22**
- SRM **38.5**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **6 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.3 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

## Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	pale ale Viking Malt	3.5 kg (56.5%)	79 %	8
Grain	monachijski typ II Viking Malt	1 kg (16.1%)	78 %	24
Grain	jęczmień prażony Viking Malt	0.2 kg (3.2%)	1 %	1000
Grain	czekoladowy ciemny Viking Malt	0.2 kg (3.2%)	1 %	1200
Grain	pszenica prażona Viking Malt	0.2 kg (3.2%)	1 %	1200
Grain	płatki jęczmienne błyskawiczne	0.6 kg (9.7%)	50 %	1
Adjunct	Cukier laktoza	0.5 kg (8.1%)	56 %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Junga (PL) - granulata	15 g	60 min	12.5 %

## Yeasts

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

FM13 Irlandzkie Ciemności	Ale	Liquid	100 ml	Fermentum Mobile
---------------------------	-----	--------	--------	------------------

### Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	500 g	Boil	15 min
Water Agent	chlorek sodu	3 g	Mash	70 min
Water Agent	siarczan wapnia	1 g	Mash	70 min
Herb	Mięta (15g) macerowana w wódce	15 g	Bottling	5 min

### Notes

- Profil wody:  
Ca+2 Mg+2 Na+ Cl- SO4-2 Alkalinity Residual  
146.3 20.0 48.1 84.0 48.9 327.0 210.9  
  
SO42-/Cl- ratio: 0.6 Very Malty  
*Jan 29, 2018, 4:24 PM*
- Mięta (15g) macerowana w wódce (2 tygodnie).  
*Jan 31, 2018, 9:33 AM*