

# 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)<br>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*