

# Trzeźwość

- Gravity **23.1 BLG**
- ABV ---
- IBU **13**
- SRM **31.3**
- Style **Specialty Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **28.9 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**

## Mash step by step

- Heat up **21.7 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type           | Name                            | Amount         | Yield | EBC  |
|----------------|---------------------------------|----------------|-------|------|
| Grain          | Maris Otter Crisp               | 6 kg (72.9%)   | 83 %  | 4    |
| Grain          | Weyermann - Melanoiden Malt     | 0.4 kg (4.9%)  | 81 %  | 70   |
| Grain          | Carafa III                      | 0.13 kg (1.6%) | 70 %  | 1300 |
| Grain          | Weyermann - Acidulated Malt     | 0.5 kg (6.1%)  | 80 %  | 4.5  |
| Grain          | Simpsons - Crystal Dark         | 0.2 kg (2.4%)  | 74 %  | 430  |
| Liquid Extract | Miód Gryczany (Buckwheat Honey) | 1 kg (12.2%)   | 70 %  | 40   |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 20 g   | 15 min | 10 %       |
| Boil    | Hallertau Spalt Select | 25 g   | 30 min | 3 %        |

## Yeasts

| Name                   | Type | Form    | Amount | Laboratory |
|------------------------|------|---------|--------|------------|
| Safale US-05           | Ale  | Culture | 1000 g | Maciej Lab |
| wyeast - roeselare mix | Ale  | Liquid  | 125 ml | wyeast     |

## Notes

- miód dodać w szczycie 1. fermentacji  
*Jan 22, 2017, 2:13 PM*