

# 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*