

Żytni milk stout

- Gravity **18.7 BLG**
- ABV ---
- IBU **36**
- SRM **54.6**
- Style **Oatmeal 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 **2.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **22.1 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (44.1%)	79 %	6
Grain	Żytni	2 kg (29.4%)	85 %	8
Grain	Biscuit Malt	0.3 kg (4.4%)	79 %	45
Grain	Caraaroma	0.25 kg (3.7%)	78 %	400
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (2.9%)	73 %	1001
Grain	Carafa II	0.2 kg (2.9%)	70 %	812
Grain	Carafa III	0.1 kg (1.5%)	70 %	1034
Grain	Briess - Chocolate Malt	0.25 kg (3.7%)	60 %	690
Sugar	Milk Sugar (Lactose)	0.5 kg (7.4%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum (Szyszka własna 2016r)	25 g	60 min	13 %
Boil	SyBILLA (Szyszka własna 2016r)	20 g	30 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04 (Starter 10h)	Ale	Dry	11 g	Safale