

Zlepieniec

- Gravity **12.4 BLG**
- ABV ---
- IBU **34**
- SRM **8.6**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.9 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (78.9%)	80 %	4
Grain	Karmelowy Czerwony	0.4 kg (7%)	75 %	59
Grain	Caramunich 2	0.2 kg (3.5%)	73 %	80
Grain	Wheat, Torrified	0.2 kg (3.5%)	79 %	4
Grain	Strzegom Pszeniczny	0.2 kg (3.5%)	81 %	6
Grain	Acid Malt	0.1 kg (1.8%)	58.7 %	6
Grain	Caraaroma	0.1 kg (1.8%)	78 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Boil	Target	10 g	60 min	10.5 %
Boil	Hersbrucker	15 g	10 min	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-04	Ale	Dry	11.5 g	Safale