

Milik Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **26**
- SRM **39.3**
- 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 **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 **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (37%)	80 %	5
Liquid Extract	ekstrakt słodowy ciemny Bruntal	1.2 kg (22.2%)	90 %	621
Grain	Brown Malt (British Chocolate)	0.25 kg (4.6%)	70 %	128
Grain	Caramel/Crystal Malt - 10L	0.25 kg (4.6%)	75 %	20
Liquid Extract	Amber Malt	1.2 kg (22.2%)	75 %	43
Grain	Carahell	0.5 kg (9.3%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	15 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	---
po RIS	Ale	Slant	200 ml	---

Extras

Type	Name	Amount	Use for	Time
Flavor	ziarna kawy	100 g	Boil	90 min
Flavor	ziarna kakaowca	100 g	Boil	60 min