

# Świąteczny Imperialny Milk stout

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **27**
- SRM **26.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **14.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.5 liter(s)**
- Total mash volume **15.4 liter(s)**

## Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **11.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **60 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.7 kg (65.2%)	81 %	4
Grain	Fawcett - Pale Chocolate	0.3 kg (7.2%)	71 %	600
Grain	iking Malt armel sweet	0.6 kg (14.5%)	78 %	70
Grain	Płatki owsiane	0.18 kg (4.3%)	85 %	3
Grain	Carafa specjal I	0.06 kg (1.4%)	65 %	800
Sugar	Milk Sugar (Lactose)	0.3 kg (7.2%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	18 g	45 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Liquid	150 ml	gęstwa

## Extras

Type	Name	Amount	Use for	Time
Flavor	imbir (świeży)	6 g	Secondary	5 day(s)
Herb	Vanilia laska (1 szt) moczone w burbonie	0.6 g	Secondary	5 day(s)
Flavor	tonka - nasiona 8 gr - moczone w burbonie	4.8 g	Secondary	5 day(s)
Flavor	płatki kokosowe (odtłuszczone)	12 g	Secondary	5 day(s)
Flavor	banan pieczony	900 g	Secondary	14 day(s)
Flavor	ksylitol - do smaku	0.6 g	Bottling	---