

# MURZYNEK BAMBO

- Gravity **16.5 BLG**
- ABV ---
- IBU **45**
- SRM **40**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **50 C**, Time **20 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (74.6%)	79 %	6
Grain	Caraaroma	0.3 kg (4.5%)	78 %	400
Grain	Weyermann - Carafa I	0.3 kg (4.5%)	70 %	690
Grain	Jęczmień palony	0.1 kg (1.5%)	55 %	985
Grain	Briess - Chocolate Malt	0.5 kg (7.5%)	60 %	690
Adjunct	Płatki owsiane	0.5 kg (7.5%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10.5 %
Boil	Pekko	20 g	15 min	13.6 %
Whirlpool	Pekko	20 g	0 min	13.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Slant	200 ml	Safale
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### Extras

Type	Name	Amount	Use for	Time
Flavor	płatki owsiane	500 g	Boil	15 min