

## 002-Papa na lepiku

- Gravity **16.6 BLG**
- ABV ---
- IBU **60**
- SRM **40**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **68 C**, Time **100 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **100 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2 kg (33.3%)	85 %	7
Grain	Monachijski	2 kg (33.3%)	80 %	16
Grain	Jęczmień palony	0.25 kg (4.2%)	55 %	985
Grain	Chocolate Malt (UK)	0.25 kg (4.2%)	73 %	887
Grain	Briess - Smoked Malt	1.5 kg (25%)	80.5 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	45 min	10 %
Boil	Marynka	20 g	30 min	10 %
Aroma (end of boil)	adha	20 g	15 min	11 %
Aroma (end of boil)	adha	30 g	5 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Brettanomyces bruxellensis	Ale	Liquid	125 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	5 min
Spice	jałowiec	10 g	Boil	5 min
Flavor	płatki dębowe oloroso	30 g	Secondary	20 day(s)

## Notes

- Gotowanie 80 min  
burzliwa 7-10 dni  
cicha- 20 dni  
refermentacja ok 14 dni w temp 16C  
leżakowanie ok 2 miesiące  
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