

# polska gurom

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **39**
- SRM **4.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 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 **19 liter(s)**
- Total mash volume **25.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **19 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2.55 kg (40.2%)	81 %	6
Grain	Pilzneński	1.9 kg (29.9%)	81 %	4
Grain	Pszeniczny	1.25 kg (19.7%)	85 %	4
Grain	Oats, Flaked	0.65 kg (10.2%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Książęcy	50 g	15 min	7 %
Whirlpool	lunga	50 g	15 min	11 %
Whirlpool	Zula	50 g	15 min	8.3 %
Whirlpool	Oktawia	50 g	15 min	7.1 %
Dry Hop	Książęcy	50 g	3 day(s)	7 %
Dry Hop	lunga	50 g	3 day(s)	11 %
Dry Hop	Oktawia	50 g	3 day(s)	7.1 %
Dry Hop	Zula	50 g	3 day(s)	8.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Lallemand - LalBrew Verdant IPA	Ale	Dry	11.5 g	Lallemand
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