

# Urodzinowy murzynek.

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **88**
- SRM **29.4**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **26.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **23.3 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	5 kg (66.4%)	80 %	7
Grain	Carafa III	0.33 kg (4.4%)	70 %	1034
Liquid Extract	WES ekstrakt słodowy jasny	1.7 kg (22.6%)	80 %	---
Grain	Carafa II	0.5 kg (6.6%)	70 %	812

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Boil	Citra	20 g	60 min	12 %
Boil	Cascade	50 g	15 min	6 %
Boil	Amarillo	65 g	15 min	9.5 %
Boil	Mosaic	50 g	5 min	10 %
Boil	Citra	60 g	5 min	12 %
Dry Hop	Citra	70 g	10 day(s)	12 %
Dry Hop	Amarillo	135 g	10 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Finning	mech irlandzki	5 g	Boil	5 min