

# BIPA 2018

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- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **37**
- SRM **32.9**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **29.9 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **23.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (65.2%)	79 %	6
Grain	Strzegom Monachijski typ I	0.5 kg (7.2%)	79 %	16
Grain	Carahell	0.5 kg (7.2%)	77 %	26
Grain	Strzegom Czekoladowy 1200	0.5 kg (7.2%)	68 %	1202
Grain	Biscuit Malt	0.25 kg (3.6%)	79 %	45
Sugar	cukier kandyzowany	0.25 kg (3.6%)	75 %	120
Grain	Płatki owsiane	0.4 kg (5.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	12.8 %
Boil	Cascade	10 g	10 min	7.1 %
Boil	Amarillo	10 g	10 min	7.5 %
Boil	Sorachi Ace	10 g	10 min	12.8 %
Boil	Cascade	20 g	2 min	7.1 %
Boil	Amarillo	20 g	2 min	7.5 %
Boil	Sorachi Ace	20 g	2 min	12.8 %

Dry Hop	Cascade	40 g	5 day(s)	7.1 %
Dry Hop	Amarillo	40 g	5 day(s)	7.5 %
Dry Hop	Sorachi Ace	40 g	5 day(s)	12.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	---

## Notes

- Słody ciemne dodać na mash-out, chmielenie na zimno pierwsze 3 .dni w temp 16 st i na ostatnie 2 dni w temp 4-5 st.  
*Dec 15, 2017, 6:16 PM*