

# IPA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **64**
- SRM **4.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.4 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (72.7%)	80 %	5
Grain	Pszeniczny	0.25 kg (9.1%)	85 %	4
Grain	Weyermann - Carapils	0.25 kg (9.1%)	78 %	4
Grain	Monachijski	0.25 kg (9.1%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	10 g	10 min	12 %
Boil	Amarillo	10 g	10 min	10.5 %
Boil	Warrior	10 g	60 min	15.5 %
Aroma (end of boil)	Citra	15 g	0 min	12 %
Aroma (end of boil)	Centennial	15 g	0 min	10.5 %
Whirlpool	Centennial	10 g	30 min	10.5 %
Whirlpool	Citra	10 g	30 min	12 %
Dry Hop	Citra	15 g	2 day(s)	12 %
Dry Hop	Centennial	15 g	2 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Spice	kwas mlekowy 5ml	1 g	Mash	1 min
Spice	chlerek wapnia 0,5 łyżeczki	1 g	Mash	1 min

Spice	sól gorzka 1,5 łyżeczki	1 g	Mash	1 min
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### Notes

- Zbyt gorzkie, mniej chmielu na 60 min ?, 21l wody ---> 8 l wystadzenie 13 zacieranie  
*Feb 21, 2018, 9:41 PM*