

## IPA 03.12.19

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **66**
- SRM **4.3**

### Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **49.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **59.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **45.1 liter(s)**
- Total mash volume **57.3 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	9 kg (73.8%)	80 %	4
Grain	Viking Pale Ale malt	2 kg (16.4%)	80 %	5
Grain	Pszeniczny	0.8 kg (6.6%)	85 %	4
Grain	Monachijski Ciemny Steinbach	0.4 kg (3.3%)	100 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	60 min	15.5 %
Boil	Magnat	50 g	60 min	11.2 %
Aroma (end of boil)	Cascade PL	50 g	5 min	5.2 %
Whirlpool	Cascade PL	50 g	10 min	5.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Finning	mech irlandzki	15 g	Boil	15 min