

# Ipa apo

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **45**
- SRM **6.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **22.1 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (85.3%)	80 %	5
Grain	Strzegom Karmel 50	0.3 kg (5.1%)	75 %	30
Grain	Pszeniczny	0.36 kg (6.1%)	85 %	4
Grain	Rahr - Red Wheat Malt	0.2 kg (3.4%)	85 %	89

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Cascade PL	30 g	5 min	5.2 %
Whirlpool	Mandarina Bavaria	25 g	10 min	10 %
Boil	Magnum	10 g	60 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock	2.5 g	Boil	15 min