PIPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **143**
- SRM **7.5**
- Style **English IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg *(94.3%)*	80 %	5
Grain	Strzegom Karmel 150	0.3 kg *(5.7%)*	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	100 g	50 min	11 %
Aroma (end of boil)	lunga	70 g	10 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	400 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	5 g	Boil	60 min

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.