

# teksas brown ipa

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **59**
- SRM **16.7**
- Style **Brown 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 **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **18.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (73.8%)	80 %	5
Grain	Strzegom Wiedeński	0.5 kg (8.2%)	79 %	10
Grain	Pszeniczny	0.5 kg (8.2%)	85 %	4
Grain	Strzegom Karmel 150	0.4 kg (6.6%)	75 %	150
Grain	Carafa II	0.2 kg (3.3%)	70 %	812

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13 %
Boil	Willamette	40 g	60 min	7.6 %
Aroma (end of boil)	Cascade	20 g	10 min	6 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	świerkowe pędy	100 g	Boil	30 min