

# AlePiwo.pl - Foreign Extra Stout

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **29**
- SRM **31.7**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **9 %/h**
- Boil size **25.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **21.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt - Pale Ale	4.3 kg (68.8%)	80 %	7
Grain	Viking Malt - Monachijski	1.4 kg (22.4%)	80 %	12
Grain	Viking Malt - Jęczmień palony	0.3 kg (4.8%)	80 %	1000
Grain	Viking Malt - Czekoladowy ciemny	0.25 kg (4%)	80 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	20 g	60 min	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	2 g	Boil	5 min