

## X - American Pale Ale - 37

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **5.8**
- Style **American Pale Ale**

### 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 **3.2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **75 C**, Time **1 min**
- Temp **100 C**, Time **60 min**

### Mash step by step

- Heat up **16 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **75C**
- Keep mash **60 min** at **100C**
- Sparge using **14.3 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	4 kg (80%)	80 %	5
Grain	Carahell	1 kg (20%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	50 min	10 %
Aroma (end of boil)	Mosaic	20 g	1 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1450	Ale	Liquid	0.125 ml	---