

## APA Keen

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU ---
- SRM **4.3**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) Bel	4 kg (81.8%)	80 %	6
9 lbs Pale Malt (2 Row) 1 lbs Caramel/Crystal Malt 8.0 oz Carapils 8.0 oz Victory Malt 0.50 oz Warrior [15.00 %] - Boil 30.0 min 0.50 oz Amarillo [9.20 %] - Boil 10.0 min 0.50 oz Cascade [5.50 %] - Boil 10.0 min 0.50 oz Warrior [15.00 %] - Boil 10.0 min 0.50 oz Amarillo [9.20 %] - Boil 0.0 min 0.50 oz Cascade [5.50 %] - Boil 0.0 min 1.0 pkg Northwest Ale (Wyeast Labs #1332)				
Grain	Caramel/Crystal Malt - 10L	0.45 kg (9.2%)	75 %	20
Grain	Briess - Carapils Malt	0.44 kg (9%)	74 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Warrior	14 g	30 min	15.5 %
Mash	Amarillo	14 g	10 min	9.5 %
Mash	Cascade	14 g	10 min	6 %
Mash	Warrior	14 g	10 min	15.5 %
Aroma (end of boil)	Amarillo	14 g	0 min	9.5 %
Aroma (end of boil)	Cascade	14 g	0 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	100 ml	FM