

# Rye APA

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **45**
- SRM **4.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **65 min**
- Evaporation rate **7 %/h**
- Boil size **27.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.2 liter(s)**
- Total mash volume **19 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.6 kg (75.9%)	80 %	5
Grain	Żytni	0.94 kg (19.8%)	85 %	8
Grain	Karmelowy Jasny 30EBC	0.2 kg (4.2%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	25 min	13.1 %
Boil	Amarillo	10 g	20 min	8.8 %
Boil	Simcoe	10 g	20 min	13.1 %
Boil	Simcoe	5 g	15 min	13.1 %
Boil	Amarillo	5 g	15 min	13.1 %
Boil	Amarillo	5 g	10 min	8.8 %
Boil	Simcoe	5 g	10 min	13.1 %
Boil	Amarillo	10 g	0 min	8.8 %
Whirlpool	Simcoe	10 g	40 min	13.2 %
Whirlpool	Amarillo	20 g	40 min	8.8 %
Dry Hop	Simcoe	50 g	4 day(s)	13.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	5 g	Mash	---