

# Rye Wheat APA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **24**
- SRM **5.2**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

## Steps

- Temp **48 C**, Time **20 min**
- Temp **67 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **52C**
- Add grains
- Keep mash **20 min** at **48C**
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt (2 Row) UK	0.5 kg (16.7%)	78 %	6
Grain	Pszeniczny	1 kg (33.3%)	85 %	4
Grain	Żytni	1 kg (33.3%)	85 %	8
Grain	Strzegom Monachijski typ I	0.5 kg (16.7%)	--- %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Chinook	5 g	15 min	13 %
Aroma (end of boil)	Cascade	5 g	15 min	6 %
Aroma (end of boil)	Oktawia	5 g	15 min	7.1 %
Dry Hop	Chinook	5 g	7 day(s)	13 %
Dry Hop	Cascade	5 g	7 day(s)	6 %
Dry Hop	Oktawia	5 g	7 day(s)	7.1 %
Whirlpool	Chinook	5 g	0 min	13 %
Boil	Magnum	6 g	60 min	12 %
Whirlpool	Cascade	5 g	0 min	6 %

Whirlpool	Oktawia	5 g	0 min	7.1 %
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### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	250 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	3 g	Boil	15 min
Water Agent	gips piwowarski	3 g	Mash	60 min

### Notes

- słód pszeniczny dodać po przerwie beta-glukanowej w 48 st aby nie doszło do rozpadu białek i utraty piany  
*Oct 18, 2017, 11:27 PM*