

# American Rye (Amarillo i CTZ)

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **27**
- SRM **4.6**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**
- Temp **80 C**, Time **5 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **5 min** at **80C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (53.8%)	80 %	5
Grain	Żytni	2.5 kg (38.5%)	85 %	8
Grain	Strzegom Pszeniczny	0.5 kg (7.7%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.5 %
Whirlpool	Amarillo	20 g	5 min	9.5 %
Dry Hop	Amarillo	30 g	5 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis