

# American Winkiel Wheat

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **27**
- SRM **5.9**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **63.3 liter(s)**

## Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **34.5 liter(s)**
- Total mash volume **46 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **34.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **40.3 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	6 kg (52.2%)	85 %	4
Grain	Strzegom Pilzneński	4.5 kg (39.1%)	80 %	4
Grain	Wheat, Torrified	0.5 kg (4.3%)	79 %	4
Grain	Strzegom Karmel 150	0.5 kg (4.3%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	20 g	60 min	15.7 %
Boil	Centennial	50 g	10 min	9.4 %
Boil	Centennial	50 g	5 min	9.4 %
Boil	Centennial	25 g	1 min	10.5 %
Boil	Citra	25 g	1 min	12 %
Dry Hop	Citra	25 g	2 day(s)	12 %
Dry Hop	Centennial	25 g	7 day(s)	9.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	30 g	Fermentis