

# Bursztynowy RYE Hop Cat

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **19**
- SRM **12.8**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

## Steps

- Temp **48 C**, Time **10 min**
- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **48 C**, Time **10 min**

## Mash step by step

- Heat up **27 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **10 min** at **48C**
- Keep mash **10 min** at **48C**
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Sparge using **32.6 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Żytni	4 kg (44.4%)	85 %	8
Grain	Pilznieński	2 kg (22.2%)	81 %	4
Grain	Karmelowy Pszeniczny Strzegom	1 kg (11.1%)	79 %	130
Grain	Strzegom Pale Ale	1 kg (11.1%)	79 %	6
Grain	Karmelowy żytni Strzegom	1 kg (11.1%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ella (AUS)	20 g	20 min	14.6 %
Boil	Ella (AUS)	20 g	10 min	14.6 %
Whirlpool	Ella (AUS)	40 g	5 min	14.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	22 g	Fermentis