

# al

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **46**
- SRM **13.9**
- Style **American Barleywine**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **23.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

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

## Mash step by step

- Heat up **18 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Karmelowy Czerwony	1 kg (13.3%)	75 %	59
Grain	Viking Pale Ale malt	5 kg (66.7%)	80 %	5
Liquid Extract	WES ekstrakt słodowy jasny	1.5 kg (20%)	80 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	100 g	60 min	4 %
Boil	Lublin (Lubelski)	50 g	25 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us05	Ale	Slant	300 ml	---