

# Brutal

- Gravity **24.6 BLG**
- ABV **11.4 %**
- IBU **90**
- SRM **15.2**
- Style **American Barleywine**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **4.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (54.5%)	80 %	5
Grain	Strzegom Monachijski typ II	1 kg (18.2%)	79 %	22
Grain	Strzegom Karmel 150	0.5 kg (9.1%)	75 %	150
Grain	Pszeniczny	1 kg (18.2%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	60 min	13.3 %
Boil	Simcoe	30 g	30 min	13.3 %
Aroma (end of boil)	Mosaic	20 g	15 min	11.8 %
Aroma (end of boil)	Mosaic	30 g	5 min	11.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis