

# Milkshake IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **33**
- SRM **4.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20 liter(s)**
- Boil time **70 min**
- Evaporation rate **13 %/h**
- Boil size **24.3 liter(s)**

## Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **19.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **24.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Płatki owsiane	0.5 kg (8.3%)	60 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (8.3%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Dragon	30 g	50 min	8.1 %
Aroma (end of boil)	Ekuanot	30 g	5 min	13.8 %
Dry Hop	Zappa	100 g	3 day(s)	4.2 %
Whirlpool	Ekuanot 45min 75 stopni	20 g	---	13.8 %
Whirlpool	Styrian Dragon 45min 75 stopni	20 g	---	8.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
kveik oslo	Ale	Slant	200 ml	---