

# Blueberry MilkShake IPA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **7 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.2 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (62.5%)	80 %	5
Grain	Briess - Carapils Malt	0.5 kg (12.5%)	74 %	3
Grain	Platki owsiane	0.5 kg (12.5%)	60 %	3
Sugar	Milk Sugar (Lactose)	0.5 kg (12.5%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Topaz	15 g	15 min	15 %
Aroma (end of boil)	Vermelho	15 g	15 min	8.1 %
Whirlpool	Topaz	25 g	0 min	15 %
Whirlpool	Vermelho	25 g	0 min	8.1 %
Dry Hop	Topaz	50 g	5 day(s)	15 %
Dry Hop	Vermelho	50 g	5 day(s)	8.1 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	3 g	Mash	0 min
Flavor	Laktoza	500 g	Boil	10 min
Flavor	Borowka amerykańska	500 g	Primary	12 day(s)