Wa-MilkshakeIPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **22**
- SRM **7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.4 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **19.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg *(77.2%)*	80 %	5
Grain	Biscuit Malt	0.3 kg *(4.6%)*	79 %	50
Grain	Pszeniczny Bestmalz	0.28 kg *(4.3%)*	82 %	5
Grain	Strzegom Karmel 150	0.2 kg *(3.1%)*	75 %	150
Grain	Płatki owsiane	0.7 kg *(10.8%)*	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	60 min	15 %
Whirlpool	Galaxy	20 g	10 min	15 %
Po wyłączeniu palnika				
Whirlpool	Mosaic	20 g	10 min	10 %
Po wyłączeniu palnika				
Dry Hop	Galaxy	20 g	5 day(s)	15 %
Dry Hop	Mosaic	30 g	5 day(s)	10 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Wyeast - 1762 Belgian Abbey II	Ale	Slant	400 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Other	Laktoza	650 g	Boil	10 min
Flavor	Płatki kokosowe	400 g	Secondary	5 day(s)
Prażone w piekarniku przez 10-15min, dodane do piwa w hop-tube'ie.				
Flavor	Wanilia	4 g	Secondary	5 day(s)
Cztery laski wanilii macerowane w whisky przez co najmniej tydzień				
Other	Mech irlandzki	5 g	Boil	10 min