

## [E] Vanilla Milkshake IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **56**
- SRM **12.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **2.1 liter(s)**
- Total mash volume **2.8 liter(s)**

### Steps

- Temp **70 C**, Time **60 min**

### Mash step by step

- Heat up **2.1 liter(s)** of strike water to **78.2C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	WES ekstrakt słodowy jasny	1.7 kg (71.1%)	80 %	45
Grain	Płatki pszeniczne	0.11 kg (4.6%)	85 %	3
Grain	Płatki owsiane	0.1 kg (4.2%)	85 %	3
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	0.35 kg (14.6%)	80 %	4
Grain	Carahell	0.13 kg (5.4%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	60 min	8.9 %
Boil	Amarillo	10 g	4 min	8.9 %
Boil	Citra	20 g	4 min	12.8 %
Boil	Ekuanot	20 g	4 min	13.3 %
Dry Hop	Amarillo	20 g	3 day(s)	8.9 %
Dry Hop	Citra	30 g	3 day(s)	12.8 %
Dry Hop	Ekuanot	30 g	3 day(s)	13.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Liquid	200 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Spice	Wanilla macerowana w whisky	2 g	Bottling	---
Flavor	Laktoza	300 g	Bottling	---