

## Milk shake IPA ( Vermont) low %

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- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **51**
- SRM **2.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.2 liter(s)**

### Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **8.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **21.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (45.5%)	80 %	5
Grain	Viking Wheat Malt	0.6 kg (18.2%)	83 %	5
Grain	Wheat, Flaked	0.3 kg (9.1%)	77 %	4
Grain	Oats, Flaked	0.4 kg (12.1%)	80 %	2
Sugar	Milk Sugar (Lactose)	0.5 kg (15.2%)	76.1 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Citra	5 g	60 min	17 %
Aroma (end of boil)	Summit	10 g	10 min	17 %
Aroma (end of boil)	Chinook	10 g	10 min	13 %
Aroma (end of boil)	Cascade	15 g	10 min	6 %
Aroma (end of boil)	Citra	10 g	10 min	12 %
Aroma (end of boil)	Citra	5 g	10 min	12 %
Aroma (end of boil)	Chinook	5 g	10 min	13 %
Aroma (end of boil)	Summit	5 g	10 min	17 %
Aroma (end of boil)	Cascade	5 g	10 min	6 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	truskawki	1000 g	Secondary	7 day(s)

## Notes

- summit-cytrusy, mandarynka, grejpfrut.  
chinook-cytrusowy (grejpfrut), korzenny, sosnowy.  
citra-cytrusy (grejpfrut, limonka), owoce tropikalne (marakuja, liczi, melon, agrest, brzoskwinia).  
cascade-owoce cytrusowe, truskawki, czarne jagody, liczi, kwiatowy, grejpfrut, korzenny.  
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