

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) |