

Blakus

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **29**
- SRM **32.1**
- Style **Dark American Lager**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **9.9 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.3 kg (69.7%)	82 %	4
Grain	Viking Carabody	0.5 kg (15.2%)	82 %	6
Grain	Viking Czekoladowy ciemny	0.5 kg (15.2%)	67 %	800

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.9 %
Boil	Premiant	6 g	20 min	8.59 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Water Agent	whirfloc	1 g	Boil	15 min