

# xmilk

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **25**
- SRM **34.3**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **5 min** at **77C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (33.3%)	80 %	5
Grain	Strzegom Czekoladowy ciemny	0.3 kg (5%)	68 %	1200
Grain	Caramel/Crystal Malt - 30L	2 kg (33.3%)	75 %	59
Grain	Colorado Honning Malt	1 kg (16.7%)	75 %	15
Grain	Strzegom pszenica prażona	0.2 kg (3.3%)	80 %	1000
Sugar	Milk Sugar (Lactose)	0.5 kg (8.3%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	25 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Spice	przyprawa do piernika	30 g	Boil	15 min
Spice	imbir	5 g	Boil	15 min
Spice	cynamon	10 g	Boil	15 min
Spice	goździki	5 g	Boil	15 min