

# Christmas milkshake orange

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **39**
- SRM **36**
- Style **Oatmeal Stout**

## 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 **7.9 liter(s)**
- Total mash volume **10.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **7.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **72C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (76.3%)	80 %	5
Grain	Strzegom Karmel 600	0.12 kg (4.6%)	68 %	601
Grain	Strzegom Czekoladowy ciemny	0.15 kg (5.7%)	68 %	1200
Grain	Strzegom Barwiący	0.05 kg (1.9%)	68 %	1300
Grain	Jęczmień palony	0.05 kg (1.9%)	55 %	985
Grain	Płatki owsiane	0.25 kg (9.5%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Marynka	10 g	30 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	6 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	0.25 g	Boil	15 min
Spice	Skórka Curacao	15 g	Boil	15 min
Flavor	Zest ze skórki pomarańczy	10 g	Boil	15 min
Flavor	Sok z 1 pomarańczy	100 g	Boil	10 min