

X-MASS ALE NO 6

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **68**
- SRM **43**
- Style **Christmas/Winter Specialty Spiced Beer**

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 **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **15.4 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **68 C**, Time **20 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **20 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.1 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 (45.5%)	80 %	5
Grain	Viking Carmel malt	1 kg (22.7%)	75 %	150
Grain	Viking Vienna Malt	1 kg (22.7%)	79 %	7
Grain	Dark Chocolate Malt	0.4 kg (9.1%)	60 %	800

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	60 g	60 min	6.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	3 orange peels	30 g	Boil	15 min

Spice	Cinnamon	7 g	Boil	15 min
Spice	cloves 16 piecces	16 g	Boil	15 min