

# Ho, Ho, Hoppy Christmas

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **45**
- SRM **30.3**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **31.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **26 liter(s)**
- Total mash volume **34 liter(s)**

## Steps

- Temp **64 C**, Time **90 min**

## Mash step by step

- Heat up **26 liter(s)** of strike water to **70.8C**
- Add grains
- Keep mash **90 min** at **64C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6.25 kg (78.1%)	80 %	5
Grain	Strzegom Monachijski typ I	0.63 kg (7.8%)	79 %	16
Grain	Płatki jęczmienne	0.5 kg (6.3%)	85 %	3
Grain	Strzegom Czekoladowy ciemny	0.16 kg (2%)	68 %	1200
Grain	Czekoladowy ciemny żytni	0.16 kg (2%)	68 %	1200
Grain	Jęczmień palony	0.31 kg (3.9%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	40 g	0 min	3.5 %
Boil	Sybilla	25 g	30 min	3.5 %
Aroma (end of boil)	Sybilla	35 g	60 min	3.5 %
Boil	Oktawia	40 g	0 min	7.1 %
Boil	Oktawia	25 g	30 min	7.1 %
Aroma (end of boil)	Oktawia	35 g	60 min	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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SafAle T-58	Ale	Dry	11.5 g	fermentis
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### Extras

Type	Name	Amount	Use for	Time
Spice	Piramidki smaku	30 g	Boil	30 min
Spice	Kawa mielona	30 g	Boil	30 min
Flavor	Laktoza	250 g	Boil	30 min