### Hokkaido

- Gravity 14.5 BLG
- ABV 6 %
- IBU **54**
- SRM **12.9**
- Style Vienna Lager

## **Batch size**

- Expected quantity of finished beer 11 liter(s)
- Trub loss 5 %
- Size with trub loss 11.6 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 14 liter(s)

# **Mash information**

- Mash efficiency 75 %
- Liquor-to-grist ratio 3.1 liter(s) / kg
- Mash size 9.9 liter(s)
- Total mash volume 13.1 liter(s)

#### **Steps**

- Temp 63 C, Time 40 min
  Temp 72 C, Time 30 min
- Temp 76 C, Time 10 min

# Mash step by step

- Heat up 9.9 liter(s) of strike water to 69.9C
- Add grains
- Keep mash 40 min at 63C
- Keep mash 30 min at 72C
- Keep mash 10 min at 76C
- Sparge using 7.3 liter(s) of 76C water or to achieve 14 liter(s) of wort

## **Fermentables**

Туре	Name	Amount	Yield	EBC
Grain	Weyermann - Vienna Malt	2 kg <i>(62.5%)</i>	81 %	8
Grain	Weyermann - Light Munich Malt	1 kg <i>(31.3%)</i>	82 %	14
Grain	Weyermann Specjal W	0.2 kg <i>(6.3%)</i>	68 %	300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sorachi Ace	20 g	60 min	10 %
Boil	Sorachi Ace	15 g	20 min	10 %
Dry Hop	Sorachi Ace	15 g	7 day(s)	10 %

#### **Yeasts**

Name	Туре	Form	Amount	Laboratory
Mangrove Jacks M76 Bavarian Lager	Lager	Dry	10 g	Mangrove Jacks

#### **Extras**

Туре	Name	Amount	Use for	Time
Fining	Irish Moss	3 g	Boil	15 min

# Notes

• Mech irlandzki uwodnic w 100 ml cieplej wody. Mar 11, 2017, 3:25 PM