Kroowa

- Gravity 13.6 BLG
- ABV 5.6 %
- IBU **35**
- SRM **53.8**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer 15 liter(s)
- Trub loss 0 %
- Size with trub loss 15.8 liter(s)
- · Boil time 75 min
- Evaporation rate 10 %/h
- Boil size 19.5 liter(s)

Mash information

- Mash efficiency 78 %
- Liquor-to-grist ratio 3 liter(s) / kg Mash size 10.7 liter(s)
- Total mash volume 14.3 liter(s)

Steps

- Temp 68 C, Time 55 min
 Temp 75 C, Time 10 min

Mash step by step

- Heat up 10.7 liter(s) of strike water to 76C
- Add grains
- Keep mash 55 min at 68C
- Keep mash 10 min at 75C
- Sparge using 12.4 liter(s) of 76C water or to achieve 19.5 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Viking Pale Ale Malt	1.8 kg <i>(45.9%)</i>	80 %	15
Grain	Viking Munich Malt Dark	0.75 kg <i>(19.1%)</i>	78 %	57
Grain	Barley, Flaked	0.4 kg (10.2%)	70 %	7
Grain	Caramel/Crystal Malt - 60L	0.2 kg (5.1%)	74 %	314
Grain	Viking Chocolate Dark Malt	0.2 kg (5.1%)	71 %	2400
Grain	Viking Caramel 600	0.12 kg <i>(3.1%)</i>	68 %	1600
Grain	Carafa II	0.1 kg (2.6%)	70 %	2164
Sugar	Milk Sugar (Lactose)	0.35 kg <i>(8.9%)</i>	76.1 %	-1

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	12 g	60 min	11.5 %
Boil	Bramling Cross	15 g	20 min	7.5 %
Boil	Bramling Cross	15 g	10 min	7.5 %

Yeasts

Name Type	Form	Amount	Laboratory
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Mangrove Jack's Ale Dry 10 g -M15 Empire Ale	Mangrove Jack's
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