Thrash metal

- Gravity 15.2 BLG
- ABV 6.3 %
- IBU **61**
- SRM **7.4**
- Style Red IPA

Batch size

- Expected quantity of finished beer 15 liter(s)
- Trub loss 5 %
- Size with trub loss 17.3 liter(s)
- Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 20.7 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3.5 liter(s) / kg Mash size 17.5 liter(s)
- Total mash volume 22.5 liter(s)

Steps

- Temp 65 C, Time 60 min
 Temp 76 C, Time 5 min

Mash step by step

- Heat up 17.5 liter(s) of strike water to 71.4C
- Add grains
- Keep mash 60 min at 65C
- Keep mash 5 min at 76C
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **20.7 liter(s)** of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	pilsner steinbach	4 kg (80%)	80 %	4
Grain	red ale viking malt	0.5 kg <i>(10%)</i>	75 %	70
Grain	Żytni	0.5 kg <i>(10%)</i>	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	40 g	60 min	12.6 %
Dry Hop	Strata	100 g	5 day(s)	14.5 %

Yeasts

Name	Туре	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	40 ml	