NO. 19 Rye Ale

- Gravity 15.2 BLG
- ABV **6.3** %
- IBU 53
- SRM **6.7**
- Style American Wheat or Rye Beer

Batch size

- Expected quantity of finished beer 34 liter(s)
- Trub loss 5 %
- Size with trub loss 37.4 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 44.9 liter(s)

Mash information

- Mash efficiency 75 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 33 liter(s)
- Total mash volume 44 liter(s)

Steps

- Temp **63 C**, Time **60 min** Temp **70 C**, Time **45 min**
- Temp **78 C**, Time **7 min**

Mash step by step

- Heat up 33 liter(s) of strike water to 70.2C
- Add grains
- Keep mash 60 min at 63C
- Keep mash 45 min at 70C
- Keep mash 7 min at 78C
- Sparge using 22.9 liter(s) of 76C water or to achieve 44.9 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	6 kg <i>(54.5%)</i>	79 %	10
Grain	Briess - Rye Malt	3 kg <i>(27.3%)</i>	80 %	7
Grain	Briess - Carapils Malt	1 kg (9.1%)	74 %	3
Grain	Monachijski	1 kg (9.1%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %
Boil	Sybilla	25 g	60 min	3.5 %
Boil	Cascade	100 g	30 min	6 %
Aroma (end of boil)	Centennial	100 g	3 min	10.5 %

Yeasts

Name	Туре	Form	Amount	Laboratory
Mangrove Jack's -M15 Empire Ale	Ale	Dry	10 g	
Mangrove Jack's M29 French Saison	Ale	Dry	10 g	

No:	tes	
	2 fermentatory po 17 litrów. Apr 8, 2018, 12:52 PM	