

## IP N 03/20/XII

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- Gravity **22.2 BLG**
- ABV **10 %**
- IBU **35**
- SRM **13.8**
- Style **Old Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **29.5 liter(s)**

### Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **69 C**, Time **30 min**
- Temp **75 C**, Time **30 min**

### Mash step by step

- Heat up **22.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **69C**
- Keep mash **30 min** at **75C**
- Sparge using **10.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	4.97 kg (59.4%)	79 %	10
Grain	Viking Malt Smoked Peat	1.6 kg (19.1%)	81 %	10
Grain	Viking Malt Karmel 200	0.4 kg (4.8%)	75 %	200
Grain	Viking Malt Cookie	0.4 kg (4.8%)	72 %	50
Sugar	cukier	1 kg (11.9%)	99 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Dry Hop	Lublin (Lubelski)	5 g	7 day(s)	4 %
Dry Hop	WAI-ITI	5 g	7 day(s)	4.1 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	10 min	4 %
Aroma (end of boil)	WAI-ITI	10 g	10 min	4.1 %
Boil	Oktawia	20 g	60 min	7.1 %
Boil	lunga	10 g	60 min	11 %
Boil	Oktawia	40 g	20 min	7.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safe US-5	Ale	Dry	11.5 g	Fermentis