

## #27 Krakoski Smo-au-g

- Gravity **7.8 BLG**
- ABV ---
- IBU **35**
- SRM **7.3**
- Style **Grodziskie/Graetzer**

### Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **33.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.4 liter(s)**

### Steps

- Temp **37 C**, Time **30 min**
- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10.1 liter(s)** of strike water to **39.8C**
- Add grains
- Keep mash **30 min** at **37C**
- Keep mash **50 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **27.2 liter(s)** of **76C** water or to achieve **33.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Wędzony Dębem Weyermann	2 kg (59.7%)	80 %	18
Grain	Weyermann - Smoked Malt	1 kg (29.9%)	81 %	6
Grain	Strzegom pszeniczny	0.2 kg (6%)	81 %	6
Grain	Weyermann - Carawheat	0.1 kg (3%)	77 %	97
Grain	Melanoiden Malt	0.05 kg (1.5%)	80 %	39

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum szyszka	15 g	60 min	9.7 %
Boil	Lublin (Lubelski)	30 g	30 min	4.3 %
Boil	Saaz (Czech Republic)	20 g	30 min	4.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

FM51 Grodzie Dębowe	Wheat	Slant	200 ml	Fermentum Mobile
------------------------	-------	-------	--------	------------------