

#162 Pepperoni Grodziskie

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **3.7**
- Style **Grodziskie/Graetzer**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **3 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **85 min**
- Evaporation rate **14 %/h**
- Boil size **32.5 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **25.4 liter(s)**
- Total mash volume **31.8 liter(s)**

Steps

- Temp **67 C**, Time **37 min**
- Temp **72 C**, Time **25 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **25.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **37 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **13.5 liter(s)** of **76C** water or to achieve **32.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|-------|-----|
| Grain | Grodziski pszeniczny wędzony dębem | 4 kg (63%) | 80 % | 3 |
| Grain | Słód Wędzony Steinbach | 2 kg (31.5%) | 80 % | 5 |
| Grain | Weyermann - Carapils | 0.35 kg (5.5%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | lunga PL | 10 g | 55 min | 9.6 % |
| Boil | lunga PL | 10 g | 30 min | 9.6 % |
| Aroma (end of boil) | Izabela | 25 g | 6 min | 7.6 % |
| Aroma (end of boil) | lunga PL | 10 g | 6 min | 9.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|------|--------|------------|
| Danstar - Windsor Ale | Ale | Dry | 11 g | Danstar |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------------------|--------|-----------|-----------|
| Fining | Whirlfloc | 2.5 g | Boil | 12 min |
| Spice | B) Kebab | 2 g | Secondary | 14 day(s) |
| Spice | B) Gyros | 2 g | Secondary | 14 day(s) |
| Spice | B) Czosnek granulowany | 1 g | Secondary | 14 day(s) |
| Spice | B) Papryka ostra | 0.5 g | Secondary | 14 day(s) |