

# RIS-Putin

- Gravity **20.2 BLG**
- ABV **8.9 %**
- IBU **69**
- SRM **45**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **20.8 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

## Steps

- Temp **64 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **23.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **5 liter(s)** of **76C** water or to achieve **20.8 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount        | Yield | EBC  |
|-------|----------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt             | 4 kg (50.6%)  | 80 %  | 5    |
| Grain | Strzegom Pilzneński              | 1 kg (12.7%)  | 80 %  | 4    |
| Grain | Viking Wheat Malt                | 1 kg (12.7%)  | 83 %  | 5    |
| Grain | Monachijski                      | 1 kg (12.7%)  | 80 %  | 16   |
| Grain | Strzegom Karmel 600              | 0.4 kg (5.1%) | 68 %  | 601  |
| Grain | Jęczmień palony                  | 0.3 kg (3.8%) | 55 %  | 985  |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.2 kg (2.5%) | 73 %  | 1001 |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 30 g   | 60 min | 15.5 %     |
| Boil    | Marynka                | 20 g   | 60 min | 8.7 %      |

## Yeasts

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

|                           |     |       |        |                  |
|---------------------------|-----|-------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Slant | 250 ml | Fermentum Mobile |
|---------------------------|-----|-------|--------|------------------|

### Extras

| Type        | Name             | Amount | Use for | Time    |
|-------------|------------------|--------|---------|---------|
| Water Agent | Kreda piwowarska | 4 g    | Mash    | 115 min |