

Pre-Workout PRO ST

SCIENTIFICALLY* PROVEN PRE-WORKOUT FORMULA

BLUE STORM

- With a plus of Essential Amino Acids
- With Caffeine and Nitric Oxide precursors
- **With anti-doping certificate by Informed-Sport**
- Low in Carbohydrates and without added sugars
- Proven efficacy through own scientific study*
- Suitable for Vegans and Allergens Free



Pre-Workout PRO ST is a highest quality concentrated powder pre-workout with a perfectly balanced composition and scientifically proven (Puente-Fernández, J. et al., Nutrients. 2020)* by the University of Greenwich that provides all the nutrients necessary to enhance your workouts and competitions, both strength and endurance.

Its extraordinary formula consists of:

- **Essential Amino Acids (EAA):** necessary and fundamental for the perfect functioning of the muscles that are working. Pre-training intake of these amino acids has been shown to delay fatigue and improve recovery through less muscle wasting (Jäger, R. et al., JISSN. 2017; Hoffman, J.R. et al., IJSNEM. 2009). Provided in optimal proportion, similar to that of muscle mass.
- **Nitric Oxide Precursors (NO):** the exchange between the amino acids Citrulline and Arginine in the presence of oxygen releases a molecule of NO that when binding to its specific receptors produces vasodilation, this allows a greater supply of blood and, therefore, of oxygen and nutrients to the active muscles, which appears to translate into improved performance (Suzuki, T. et al., JISSN. 2016).
- **Taurine:** among others, it has antioxidant, metabolic and ergogenic effects (Galloway, S.D.R. et al., JAP. 2008). Its intake along with the other ingredients has been shown to improve muscular endurance during exercise (Hoffman, J.R. et al., JCSR. 2008).
- **Tyrosine:** this amino acid improves focus and concentration when combined with caffeine (Zaragoza, J. et al., JISSN. 2019), something very important to perform at your best in your training or competition.
- **Betaine:** this glycine derivative improves performance because, among other effects, it increases the rate of re-synthesis of creatine and increases the levels of nitric oxide (NO) in blood (Trepanowski, J.F. et al., JCSR. 2011).

It also improves total volume loading to fatigue, in addition to improvements in power and force output (Lee, E.C. et al., JISSN. 2010).

- **Acetyl-L-Carnitine:** this acetylated form of L-carnitine has the ability to cross the blood-brain barrier, thus improving performance at two levels:
 - 1º) improves the metabolism of the mitochondria because it donates its acetyl group to generate acetyl-CoA (fundamental in the Krebs cycle for obtaining energy).
 - 2º) it exerts a cholinergic effect (it also donates its acetyl group to synthesize acetylcholine), that is, it improves cognitive function and concentration (Onofrij, M. et al., ERN. 2013).
- **Caffeine and Yerba Mate:** we have added (in pure form and as Yerba Mate) the most effective ingredient for direct performance improvement, both endurance and strength (Grgic, J. et al., BJSM. 2019), the caffeine. In addition to activating the Central Nervous System (CNS), it delays fatigue and optimizes the use of cellular fuels (glycogen and fat). But the most important thing is that it improves muscle contraction (Lopes, J.M. et al., JAP. 1983), hence its effectiveness especially when fatigue begins.

And like all Crown Sport Nutrition® products with spectacular taste and digestibility.

*This matrix of ingredients was studied with 2 servings (30 g) of Pre-Workout PRO ST together with about 16 g of added carbohydrates, so if you want to take a product similar to that of the scientific study, you can add 2/3 of the serving (approx. 20 g = 1,5 scoops) from **Isodrink & Energy Lemon** and the effectiveness will be maximum according to the scientific study.

*Puente-Fernández, J. y col. *Effects of multi-ingredient preworkout supplementation across a five-day resistance and endurance training microcycle in middle-aged adults. Nutrients. Dic. 2020.*

Ingredients (Blue Storm flavour): Glucose polymers, (10%) L-leucine, (9%) L-lysine HCl, L-citrulline malate, L-arginine, betaine HCl, (5%) L-isoleucine, (5%) L-valine, acid: citric acid; N-acetyl-L-carnitine HCl, (4%) L-threonine, (3,7%) L-phenylalanine, L-tyrosine, taurine, (2,3%) L-methionine, anti-caking agent: silicon dioxide; flavouring, anhydrous caffeine, Yerba mate extract (*Ilex paraguariensis*) (2% caffeine), (1%) L-tryptophane, sweetener: sucralose; calcium salt of orthophosphoric acid, colouring: Bright Blue FCF.

Instructions for use: depending on the body weight of the person:

- **People up to 80 kg:** mix 15 g (3 scoops, equivalent to one serving) in 250 ml of water and drink it approx. 45 to 30 minutes before training.
- **People between 80 and 100 Kg:** mix about 22,5 g (4,5 scoops, equivalent to 1,5 servings) in 300 ml of water and drink it approx. 45 to 30 minutes before training.
- **People over 100 kg:** mix about 30g (6 scoops, equivalent to 2 servings) in 400 ml of water and drink it approx. 45 to 30 minutes before training.

Available flavors: Citric and Blue Storm.

Available formats: Tin of 300 g (20 servings of 15 g) and single-dose sachet of 15 g.

NUTRITIONAL INFORMATION	Per 15 g = 1 serving	Per 22,5g = 1,5 servings	Per 30 g = 2 servings
Energy	109 kJ 26 kcal	164 kJ 39 kcal	218 kJ 52 kcal
Fat	0 g	0 g	0 g
Carbohydrates	2,2 g	3,3 g	4,4 g
• of which Sugars	0 g	0 g	0 g
Protein	3,7 g	5,6 g	7,4 g
Salt	0 g	0 g	0 g
COMPOSITION:			
Essentials Amino Acids	6.000 mg	9.000 mg	12.000 mg
• of which BCAAs (ratio 2:1:1)	3.000 mg	4.500 mg	6.000 mg
Citrulline Malate	1.250 mg	1.875 mg	2.500 mg
Arginine	1.250 mg	1.875 mg	2.500 mg
Betaine HCl	1.000 mg	1.500 mg	2.000 mg
Acetyl-L-Carnitine	680 mg	1.020 mg	1.360 mg
Taurine	500 mg	750 mg	1.000 mg
Tyrosine	500 mg	750 mg	1.000 mg
Caffeine Total	203 mg	304,5 mg	406 mg
Yerba Mate (2% in Caffeine)	150 mg	225 mg	300 mg



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Collaborators:

