MUSCLE SPORTS NUTRITION

Product Data Sheet

MAX ARM

Contains Monstrous Anabolic Growth Elements Promoting Muscle-Building Overload!*

The Complete Post-Exercise Muscle Hydration Recovery Innovation!

Size: Net Wt. 2.64 lbs (1,198 g)
Servings Per Box: 2 Scoops (Approx. 64 g)
Flavors: Intense Strawberry

Max ARM (Anabolic Recovery Matrix) from Max Muscle Sports Nutrition (MMSN) was designed to follow rapid recovery and anabolic science. Created to be the ultimate post-workout formula, **Max ARM** provides the necessary nutrients to support maximum muscle mass activation, restore fluids and electrolytes, replenish glycogen and accelerate overall muscle recovery and repair. **Max ARM** provides bioactive ingredients to support muscle enzyme activators of protein synthesis, Akt/mTOR (rapamycin) and p70 S6 kinases, muscle Heat Shock Protein (HSP) activating nutrients and GLUT4 potentiators.†

The science of recovery shows that there are 3 critical requirements for optimal muscle recovery and repair following an intense exercise session. First, is the replacement of fluids and electrolytes. Second, is the rapid replenishment of muscle glycogen, and third is the replacement of amino acids to support the muscle rebuilding process and minimize muscle protein breakdown.

To support protein synthesis and nitrogen retention, each serving of **Max ARM** delivers 28 grams (56% DV) of the highest quality blend of whey protein isolate (WPI) and whey protein concentrate (WPC) available. **Max ARM** contains the Muscle Akt/mTOR and p70 S6k Activator Blend. Muscle Akt/mTOR and p70 S6k kinases are muscle enzyme activators of protein synthesis and supported by the branched-chain amino acids (BCAA) along with arginine, citrulline malates and the same proprietary blends found in MMSN **Cx3™** including CreaPure®, Creatine MagnaPower®, and Creatine Pyruvate. The BCAAs (leucine, isoleucine and valine), particularly leucine, have anabolic effects on protein synthesis, muscle cell growth and decreasing the rate of protein breakdown (degredation). This effect is most beneficial post-exercise. **Max ARM** contains highly concentrated levels of leucine. The dramatic effect of supplementing with the BCAAs and arginine is mediated through signaling pathways controlling protein synthesis involving phosphorylation of the target enzymes Akt/mTOR (rapamycin), a protein kinase and the sequential stimulation of p70 ribosomal S6 kinase (p70 S6K) through enhanced translation of specific mRNAs. The Akt/mTOR pathway in muscle is upregulated during the hypertrophy (increase in muscle size) phase.†

An exciting area in the molecular biochemistry of protein synthesis are the role of Heat Shock Proteins (HSP). HSP are molecular chaperones that aid in the transport of proteins throughout the cell's various compartments to support protein synthesis. HSP or chaperones also protect the newly synthesized proteins against denaturation. HSP stabilize proteins as a result of altered pH due to high intensity exercise, oxygen deprivation, and stress. Left uncorrected, mis-folded proteins form aggregates that may eventually kill muscle cell. To support this important function of protein synthesis, **Max ARM** contains the Heat Shock Protein Activator Blend with glutamine peptides, bilberry, schisandra, rhodiola and paeonia.

Max ARM contains the functional glutamine peptides found in Gluta Matrix™ including the Gluta-Tri Triple Fusion Blend™ (L-glutamine, glutamine peptides [L-alanyl-L-glutamine, L-glycyl-L-glutamine (from hydrolyzed gluten)]. Special receptors in the intestine facilitates maximum and intact absorption of glutamine peptides to allow the glutamine to be delivered to the muscles promoting a rapid recovery from exercise and supporting lean muscle mass.

Each serving of **Max ARM** provides 32 grams of multi-source carbohydrates with rapid to extended absorption rates including, waxy maize starch (amylopectin), maltodextrin, fructose and dextrose. Waxy maize starch has the highest molecular of the group followed by maltodextrin with an intermediate molecular weight and fructose with the lowest molecular weight. Max ARM provides the ideal forms and amounts of carbohydrates to pack glycogen in muscles for maximum recovery.

KEY FEATURES

- *The Complete Post-Workout Recovery Formula to Maximize Lean Muscle Growth and Accelerate Recovery!†*
- *Designed to Follow Rapid Response and Recovery Science†*
- *Features Multi-Fractional Whey Proteins and Full-Spectrum Carbohydrates.*
- *Provides Muscle Akt/mTOR and p70(S6K) Activators†*
- *Provides Muscle Heat Shock Protein (HSP) Activators†*
- *Provides Muscle GLUT4 Activators†*
- *Instantized for Rapid Mixing and Assimilation*

KEY BENEFITS

- *Post-workout scientific innovation to provide complete nutrition to support maximum protein synthesis (anabolism), restore fluids and electrolytes, replenish glycogen and accelerate overall muscle repair and recovery.†*
- *Packed with 28 gm (56% DV) multi-fractional whey proteins from WPI and WPC sources to ensure optimal nitrogen retention and lean muscle mass gain.†*
- *Provides bioactive ingredients to support the muscle enzyme activators Akt/mTOR (rapamycin) and p70 S6 kinase essential for protein synthesis.†*
- *Provides the same proprietary blend of creatines found in Cx3 Blend including CreaPure®, Creatine MagnaPower® (Magnesium Creatine Chelate), and Creatine Pyruvate.*
- *Contains the branched-chain amino acids (leucine, isoleucine, and valine), with high potency leucine, in addition to arginine, creatine and citrulline malate.*
- *Contains the Heat Shock Protein (HSP) Activator Blend with glutamine peptides, bilberry, schisandra, rhodiola and paeonia.†*
- *Contains the functional glutamine peptides found in Gluta Matrix™ including the Gluta-Tri Triple Fusion Blend™ (L-glutamine, glutamine peptides [L-alanyl-L-glutamine, L-glycyl-L-glutamine (from hydrolyzed gluten)].*

(cont'd on p.2)

(cont'd on p.2)

Your assurance of quality®

1641 S. Sinclair Street • Anaheim, California 92806 • 714.456.0700 • 714.456.0727 fax

www.maxmuscle.com

MUSCLE SPORTS NUTRITION

Size: Net Wt. 2.64 lbs (1,198 g)
Servings Per Box: 2 Scoops (Approx. 64 g)
Flavors: Intense Strawberry

Supplement Facts

Serving Size: 2 Scoops (Approx. 64 gm) — Servings Per Container: 18
Calories: 250 — Calories from Fat: 0

	Amount Per Serving	% Daily Value*
Total Fat	0.5 g	1%
Saturated Fat	0 g	0%
Trans Fat	0 g	0%
Cholesterol	60 mg	19%
Sodium	75 mg	3%
Total Carbohydrates	32 g	11%
Dietary Fiber	1 g	5%
Sugars	19 g	**
Protein	28 g	56%
Vitamin C	250 mg	417%
Thiamin	1.5 mg	100%
Riboflavin	1.7 mg	100%
Niacin (niacinamide)	20 mg	100%
Vitamin B6 (pyridoxine HCl)	2 mg	100%
Folic Acid	400 mcg	100%
Vitamin B12 (cyanocobalamin)	30 mcg	500%
Pantothenic Acid (D-calcium pantothenate)	50 mg	500%
Calcium (di-calcium phosphate)	100 mg	10%
Phosphorus (dicalcium phosphate)	195 mg	19%
Magnesium chelate glycinate (18% chelate)	200 mg	50%
Zinc (citrate)	15 mg	100%
Copper (citrate)	2 mg	100%
Manganese (gluconate)	1.5 mg	75%
Chromium (polynicotinate)	160 mcg	133%
Chloride (sodium chloride)	60 mg	2%
Max ARM Heat Shock Protein Activator Blend: Gluta Matrix™ Gluta-Tri Triple Fusion Blend™ (L-Glutamine, Glutamine peptides [L-alanyl-L-glutamine, L-glycyl-L-glutamine (from hydrolyzed gluten)], Bilberry (Vaccinium myrtillus) extract (contains 5% anthocyanosides), Schisandra chinensis extract (berry) (contains 2% schisandrins), Rhodiola rosea extract (contains 3% total rosavins and min. 1% salidrosides), Paeonia lactiflora extract (root) (contains 10% paeoniflorin)	2,905 mg	**
Max ARM Muscle Akt/mTOR and p70 S6k Activator Blend: L-Leucine, L-Valine, L-Isoleucine, L-Arginine, L-Citrulline malate, Creatine Cx3™ Blend (CreaPure®, Creatine MagnaPower® (Magnesium Creatine Chelate), Creatine Pyruvate	8,250 mg	**
Max ARM GLUT4 Activator Blend: Banaba leaf extract (Lagerstroemia speciosa) (contains 1% corosolic acid), Promilin® (fenugreek extract, 4-hydroxyisoleucine)	300 mg	**

*Percent Daily Values are based on a 2,000 calorie diet.
**Daily Value not established.

Ingredients: Waxy Maize Starch (Amylopectin), Whey Protein Isolate, Whey Protein Concentrate, Maltodextrin, Dextrose, Crystalline Fructose, Citric Acid, Natural & Artificial Flavor (FD&C Red No. 40), Acesulfame Potassium, Sucralose Sweetener.

Directions: Mix 2 scoops (approx. 64 g) with 12-16 oz ice cold water. Shake or stir slowly to avoid excess foaming. Suggested use immediately after workout preferably without food. Stay well hydrated throughout the day while using this product especially in hot and humid temperatures.

Promilin® (U.S. Patent #: 7,338,675) is a registered trademark of TSI Health Sciences, Inc., USA.
Albion® Magnesium chelate glycinate (18% chelate)
Does not contain Gluten.

Allergy Information: Manufactured in a facility that processes milk, soy, shellfish, egg, peanuts and other tree nuts, and wheat.

KEEP OUT OF THE REACH OF CHILDREN.

STORE IN A COOL, DRY PLACE IN THE ORIGINAL CONTAINER AWAY FROM MOISTURE AND SUNLIGHT. ALWAYS KEEP TIGHTLY SEALED.

(cont'd from p.1)

TARGET MARKET

Primary: *Serious athletes looking for a complete, science-based and comprehensive anabolic and enhanced recovery formula.*

RECOMMENDED STACK

- **Max Vit-Acell**
- **Pro-Vite**
- **Max EFA**
- **Max Ultra 100**
- **Max Complete**

(cont'd from p.1)

For maximum muscle cell carbohydrate enhancement, **Max ARM** provides the GLUT4 Activator Blend with banaba leaf extract (1% corosolic acid) and Promilin® (fenugreek extract, 4-hydroxyisoleucine). Promilin® functions to potentiate the action of insulin resulting in complete post-exercise replenishment of carbohydrates in the muscles and promoting increases in muscle mass and strength. Additionally, research has demonstrated that corosolic acid, a triterpenoid compound, facilitates glucose transport within cells by stimulating glucose transporter isoform 4 translocation (GLUT4). By activating GLUT4 this assures maximum carbohydrate utilization by muscles.†

Max ARM is the total package for complete recovery science providing the necessary ingredients for rapid and efficient recovery and muscle building. **Max ARM** is instantized and delivers a refreshing and satisfying Intense Strawberry flavor. Hydration recovery at its finest…you won't need anything else!

Key References

1. Ivy JL, Ding, Z, Hwang H, et al. Post exercise carbohydrate-protein supplementation: phosphorylation of muscle proteins involved in glycogen synthesis and protein translation. Amino Acids. 2008;35:89-97.
2. Cribb PJ, Hayes A. Effects of supplement timing and resistance exercise on skeletal muscle hypertrophy. Med Sci Sports Exerc. 2006; 38:1918-25.
4. Yao K, Yu-Long Y, Chu W, et al. Dietary arginine supplementation increases mTOR signaling activity in skeletal muscle of neonatal pigs. J Nutr. 2008;138:867-72.
5. Lynch CJ. Role of leucine in the regulation of mTOR by amino acids: Revelations from structure-activity studies. J Nutr. 2001;131:861S-65S.
6. Blomstrand E, Eliasson J, Karlsson HK, Kohnke R. Branched-chain amino acids activate key enzymes in protein synthesis after physical exercise. J Nutr. 2006;136:269S-73S.
7. Katsanos CS, Kobayashi J, Sheffield-Moore M, et al. A high proportion of leucine is required for optimal stimulation of the rate of muscle protein synthesis by essential amino acids in the elderly. Am J Physiol Endocrinol Metab. 2006;291:E381-E387.
8. Roth E. Nonnutritive effects of glutamine. J Nutr. 2008;138:2025S-2031S.
9. Bodine SC, Stitt TN, Gonzalez M, et al. Akt/mTOR pathway is a crucial regulator of skeletal muscle hypertrophy and can prevent muscle atrophy in vivo. Nature Cell Biol. 2001;3:1014-19.
10. Thompson D, Williams C, McGregor SJ, et al. Prolonged vitamin C supplementation and recovery from demanding exercise. Int J Sport Nutr Exerc Metab. 2001;11:466-81.
11. Yan D, Kiyoto S, Ohmi Y, et al. Paeoniflorin, a novel heat shock protein-induced compound. Cell Stress Chaperones. 2004;9:378-89.
12. Deldicque L, Theisen D, Bertrand L, et al. Creatine enhances differentiation of myogenic C2C12 cells by activating both p38 and Akt/PKB pathways. Am J Physiol Cell Physiol. 2007;293:C1263-71.
13. Panossian A, Wikman G. Pharmacology of Schisandra chinensis Bail.: an overview of Russian research and uses in medicine. J Ethnopharmacol. 2008;118:183-212.
14. Milbury PE, Graf B, Curran-Celentano JM, et al. Bilberry (Vaccinium myrtillus) anthocyanins modulate heme oxygenase-1 and glutathione S-transferase-pi expression in ARPE-19 cells. Invest Ophthalmol and Vis Sci. 2007;48:2343-49.
15. Panossian A, Wagner H. Stimulating effect of adaptogens: an overview with particular reference to their efficacy following single dose administration. Phytother Res. 2005;19:819-38.
16. Ruby BC, Gaskill SE, Slivka D, Harger SG. The addition of fenugreek extract (Trigonella foenum-graecum) to glucose feeding increases muscle glycogen resynthesis after exercise. Amino Acids. 2005;28:71-6.
17. Shi L, Zhang W, Zhou YY, et al. Corosolic acid stimulates glucose uptake via enhancing insulin receptor phosphorylation. Eur J Pharmacol. 2008;584:21-9.
18. Miura T, Itoh Y, Kaneko T, et al. Corosolic acid induces GLUT4 translocation in genetically type 2 diabetic mice. Biol Pharm Bull. 2004;27:1103-5.

(cont'd from p.1)

KEY BENEFITS

- *Provides 32 gm of full-spectrum molecular weight carbohydrates from waxy maize starch, maltodextrin, fructose and dextrose to replenish glycogen stores andenergize the muscles.†*
- *Contains Promilin® (fenugreek extract), containing the bioactive amino acid 4-hydroxyisoleucine, has been added to potentiate the action of insulin for post-exercise replenishment of carbohydrates into the muscles.†*
- *Contains corosolic acid, a triterpenoid compound, facilitates glucose transport within muscle cells through by stimulating glucose transporter isoform 4 translocation (GLUT4). The activation of GLUT4 assures maximum carbohydrate utilization by muscles.†*
- *Contains essential vitamin cofactors, antioxidants and major and trace minerals needed to support maximum protein synthesis and glycogen repletion.†*
- *Contains a complete electrolyte complex including sodium, potassium, magnesium, calcium, and chloride.*
- *Instantized for rapid mixing and rapid assimilation of nutrients to be delivered to your muscles where they are needed.†*
- *Delicious and refreshing Intense Strawberry flavor.*

To report a serious adverse event, contact:
Max Muscle Sports Nutrition
1641 S. Sinclair St. Anaheim, CA 92806
www.maxmuscle.com

MUSCLE MASS SPORTS NUTRITION

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.