

Taiyo is a pioneer in the research and manufacture of functional ingredients for the food, beverage, medical food and pharmaceutical industries. Taiyo focuses on the development of innovative ingredients, derived from natural sources, to further develop the body's ability to protect and manage one's health.

## www.taiyointernational.com

Sun	chenon®
-----	---------

Obtained from the leaf of green tea, Sunphenon is a series of highly purified tea polyphenols rich in natural catechins that have been shown to have numerous physiological benefits, including antioxidant, anti-microbial, deodorant and thermogenic (fat burning) activities. Sunphenon is produced from pesticide controlled green tea leaf to assure compliance with stringent U.S. FDA residual pesticide regulations for tea as outlined in 40CFR180. Sunphenon is extracted via a water infusion process and decaffeinated using only approved food grade solvents.

## Application

Products	Specification	Application
Sunphenon EGCg	EGCg >94%, caffeine <0.1%	High-purity, decaffeinated EGCg for use in supplements, foods and beverages without tea taste or color.
Sunphenon XLB100	polyphenols >80%, catechins >60%, EGC > 40%, caffeine <1%	Decaffeinated gallate free catechins. Excellent stability and very low astringency. Perfect for flavor sensitive beverages.
Sunphenon XLB	polyphenols >80%, catechins >60%, EGCg >15%, EGC > 25%, caffeine <1%	Decaffeinated catechins. Excellent stability and very low astringency. Perfect for flavor sensitive and protein based beverages.
Sunphenon 90LB	polyphenols >90%, catechins >80%, EGCg >40%, caffeine <1%	Decaffeinated catechins. Excellent tea taste and low astringency. Perfect for beverages.
Sunphenon 90D	polyphenols >90%, catechins >80%, EGCg >45%, caffeine <1%	Decaffeinated catechins for use in supplements, foods and beverages with or without tea taste or color.
Sunphenon 90M-B	polyphenols >80%, catechins >75%, EGCg >40%, caffeine <10%	High-purity catechins for use in supplements, foods and beverages with or without tea taste or color.
Sunphenon 70H-T	polyphenols >70%, catechins >60%, EGCg >25%, caffeine 12.5-20%	Mid-level catechins and natural green tea caffeine. For supplement use.
Sunphenon 30LB-T	polyphenols >25%, catechins >15%, caffeine <1%	Decaffeinated by a solvent-free process. Subtle bitter taste for use in beverages.
Sunphenon 30S-O	polyphenols >25%, catechin >15%, caffeine <10%	Certified Organic. Excellent tea taste with good stability in beverages.
Sunphenon 30R-T	polyphenols >25%, catechins >15% caffeine <10%	Prepared using roasted tea leaves. For supplement and food use.
Sunphenon 30M-B	polyphenols >25%, catechins >15%, caffeine <10%	Mildly bitter standardized extract. For supplement and food use.
Sunphenon 20-T	polyphenols >15%, caffeine <10%	Standardized polyphenols for use as a base in beverage, food and supplement formulations.
Sunphenon CF-T	polyphenols >50%, catechins > 45% EGC > 22%, caffeine > 20%	Natural green tea caffeine. For beverage or supplement use.
Sunphenon MRF	polyphenols > 5%, caffeine < 6%, fluoride > 1,200 ppm	Natural green tea fluoride. For beverage or supplement use.
Matcha 101-O	green tea leaf powder, polyphenols>5%	Organic green tea leaf powder. Fresh taste and vivid green color for use in beverages, dairy and confections.
Matcha 40-O	green tea leaf powder, polyphenols>18%	Blend of organic green tea leaf powder and catechins for use in beverages, dairy and confections.

## **Suntheanine**<sup>®</sup>

Suntheanine	> 98% L-theanine	Taiyo's exclusive brand of pure L-theanine, the award-winning, patented amino acid for stress, mental relaxation and focus. Suntheanine® is GRAS Affirmed with FDA letter of no Objection (GRN 000209).
SunAc	ctive®	Nutrition Delivery System offering unique fortification and dispersion of functional ingredients with no off flavor or instability. SunActive offers sustained release that is mild on the gastrointestinal system, has an improved absorption and bioavailability. SunActive is stable against heat, salt, pH and oxidation.
SunActive Fe-P800	G 85.0 ± 5.0 mg/g iron content	Dispersable Iron delivery system for use in foods, beverages and dietary supplements.
SunActive Fe-P80L	K 85.0 ± 5.0 mg/g iron content	Iron delivery system for use in foods, instant beverages and dietary supplements.
SunActive Zn-P240	250.0 ± 25.0 mg/g zinc content	Zinc delivery system for use in foods, beverages and dietary supplements.
SunActive Q-10E	10-12% Coenzyme Q10 content	Water dispersible powder grade Coenzyme Q10 for use in RTD and instant beverages.
Sun <b>fil</b>	ber®	Partially Hydrolyzed Guar Gum (PHGG). An all natural galactomannan soluble fiber that is tasteless, colorless and odorless. Sunfiber® delivers high fiber content and excellent pH, heat and freeze/thaw stability. Clinically proven to lower glycemic index, improve mineral absorption and promote intestinal regularity.
Sunfiber R	> 85% soluble fiber - regular grade	Regular grade for use in foods, beverages and supplements,

Sunfiber AG > 85% soluble fiber - agglomerated Agglomerated for powder applications, offering instant solubility.

5960 Golden Hills Drive, Minneapolis, MN 55416 USA • 763-398-3003 • Fax: 763-398-3007 • www.taiyointernational.com • email: sales@taiyoint.com

Sunphenon®, Suntheanine®, SunActive® and Sunfiber® are registered trademarks of Taiyo International, Inc. U.S. and International patents pending. © 2011 Taiyo International, Inc.