embrace the future
WESTON® 705 is the next generation nonylphenol-free liquid phosphite antioxidant for plastics and elastomers. It is approved for broad food contact in more than 50 countries worldwide, including Europe, US and China.

Engineered as a simple drop-in solution for TNPP replacement, it is the clean and safe solution for polyethylene and elastomer producers. WESTON® 705, a thoroughly tested liquid antioxidant, enables polyethylene resin producers to increase operational efficiency while avoiding costly capital investments. With WESTON® 705 technology, packaging converters and elastomer producers meet today’s processing demands while exceeding the regulatory challenges of tomorrow. WESTON® 705 is commercially available in every region of the world, backed by Addivant’s team of technical and regulatory experts.
In 2015, the natural foods market with health supplements was a 275 billion dollar industry, making it the largest health and wellness food segment*. It’s not just big, it’s growing faster than any other packaged food segment.

The numbers tell the story: consumers are paying more attention to their health and what they consume. More than 40% of consumers rate health criteria ‘very important’ in their purchasing decision and seek full transparency about their food**. Consumers aren’t only questioning what’s in their food, they also want to know what’s inside the wrapping used to package their food.

Next generation packaging materials must provide brands and consumers with peace of mind.

*Euromonitor Health and Wellness Food, 2015
**Nielsen Wellness Food Survey, 2015
MANUFACTURERS AND BRANDS WANT FUTURE-PROOF ANTIOXIDANTS

Regulatory and consumer safety
Resin and packaging manufacturers need nonylphenol-free antioxidants that perform well on all fronts and anticipate the emerging regulatory trends and the increased focus on Non-Intentionally Added Substances.
The next generation packaging has to be ‘clean’.

Performance for manufacturers
Next generation antioxidants need to match or surpass conventional antioxidants’ performance without creating operational inefficiencies in the value chain, from the polyethylene resin producer to the brand owner.
The next generation antioxidant has to be efficient.

Operational and supply chain efficiency
It is a small world after all, and new solutions must be commercially available in every region, backed with local service and technical support.
The next generation supply has to be global.
**SUPERIOR PRODUCTIVITY AND QUALITY IN NUMBERS**

**WESTON® 705 PROVIDES EXCEPTIONAL ALL-ROUND PERFORMANCE**

Compared to benchmark phosphite antioxidants, WESTON® 705 has up to 20% higher content of phosphorus and more reactive structures to decompose peroxide species formed during melt processing. This preserves the desired polymer structure from damage, even under severe conditions.

WESTON® 705 is a liquid antioxidant that can be more easily incorporated and dispersed into the polymer matrix to protect the resin from the very first step of the extrusion process. Its high solubility in polyethylene eliminates plate-out during cooling and minimizes the migration while in use, making sure every molecule of WESTON® 705 protects the resin.

### INCREASED PRODUCTIVITY

Less downtime for maintenance related to gels, die build-up and plate-out. Possibility for increased regrind usage.

### IMPROVED PRODUCT PROPERTIES

Reduced blooming, better color retention and less gels improve resins’ elongation retention, dart impact and film clarity and aesthetics.

**10X LESS GELS**

Tenfold reduction in gel formation improves productivity up to 5% and enhances film sealability while reducing film breakage during handling.

**10X REDUCED PLATE-OUT**

Tenfold reduction in plate-out reduces downtime for maintenance and increases productivity up to 4%.

**90% LESS BLOOMING**

90% lower additive blooming to the film surface improves packaging aesthetics and organoleptic properties.

**3X BETTER MELT PROTECTION**

Threefold better melt flow retention, maintains the original mechanical properties and allows increased usage of regrind.

**3X LESS GAS FADING**

Excellent color retention upon exposure to NOx gas.

* AO-168 is a generic name for Tris (2,4-ditert-butylphenyl) phosphite.

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The food packaging industry is facing increasing levels of regulatory and consumer scrutiny as new analytical methods and toxicological data become available.

WESTON® 705 has been extensively tested to ensure compliance with the latest demands of both the US Food and Drug Administration (FDA) and the European Food Standards Agency (EFSA). These are recognized as the most stringent regulations for food contact materials in the world.

A full potential NIAS profile is available, with associated toxicological data, allowing resin manufacturers to perform safety assessments, including Non-Intentionally Added Substances.

WESTON® 705 is included on all current global chemical inventories and has achieved broad food contact approvals around the world. Further details of the approvals can be obtained from the regulatory department within Addivant™.
Addvant™ is the global leader in liquid phosphite antioxidant chemicals with decades of experience in antioxidant manufacturing. WESTON® 705, the latest addition to our well-established Addvant™ brand in the plastics and elastomer markets, has now secured comprehensive regulatory approval for food packaging.

Thanks to its leading position, Addvant™ boasts broad options and an unequalled supply security for its raw materials around the globe. Addvant™ operates from 11 production sites globally. WESTON® 705 is currently manufactured in the USA and will be complemented by multiple regional supply points in Asia and Europe.

SECURITY OF SUPPLY

IN 2016, ADDVANT™ TRIPLES ITS WESTON® 705 CAPACITY TO MEET INCREASING GLOBAL DEMAND
WESTON® 705 handles and feeds like TNPP with accurate liquid feeding while avoiding costly capital investments to transition from TNPP.

Addviant’s dedicated team of technical service engineers can assist customers in their transition to WESTON® 705. We provide guidance and on-site support during every step of the process, from unloading, storage, and handling, to analysis and in-polymer performance evaluation to ensure a seamless transition.

For customers without existing liquid feeding capabilities, Addviant has partnered with Coperion K-Tron to install liquid loss-in-weight feeders and incorporate them quickly and seamlessly in existing production lines. This equipment provides unparalleled precise feeding of liquid antioxidant with a negligible deviation from set-point (<0.016%).
Addivant™ is a new global company deeply rooted in the antioxidant industry with a history spanning more than 100 years. Through a prestigious heritage from companies like Uniroyal, Great Lakes, GE Specialty Chemicals and Crompton, Addivant™ brings fresh thinking to the polymer and rubber industries.

We set out to become the world’s fastest innovator and most reliable solution provider to the polyolefin and elastomer markets. Currently, Addivant™ has the broadest range of antioxidants in the world, coupled with a unique portfolio of antiozonants, inhibitors, coupling agents, impact modifiers and UV stabilizers.