

## **Technical Information**

www.addivant.com

Effective: April 2013

# WESTON® 619F phosphite

#### **Phosphite Antioxidant**

## **Description**

WESTON® 619F phosphite is a phosphite that is a highly effective color and molecular weight stabilizer for polyolefins, polyesters, elastomers, styrenics, engineering thermoplastics, and adhesive formulations. It also contributes to the thermal and UV stability of these polymers. This product is available in a flake form.

#### **Chemical Structure**

Distearyl Pentaerythritol Diphosphite C<sub>41</sub>H<sub>82</sub>O<sub>6</sub>P<sub>2</sub>

Chemical Abstract Number: 3806-34-6

(1) WESTON® 619F phosphite contains no more than 1% by weight of Triisopropanolamine (CAS# 122-20-3).

## Typical physical properties of WESTON® 619F phosphite

| Appearance                              | White Flakes       |
|---|--------------------|
| Specific Gravity @ 60°C/15.5°C          | 0.920-0.935        |
| Acid No. (mg KOH/g)                     | 1.0 max            |
| Refractive Index @ 60°C (140°F)         | 1.4560 - 1.4590    |
| Phosphorus Content (%)                  | 7.8-8.2            |
| Flash Point (Pensky-Martens Closed Cup) | 188°C (370°F)      |
| Bulk Density [lb./ft³] & [g/ml]         | 27 & 0.43          |
| Melt Range                              | 37-46°C (99-115°F) |
| Formula Weight                          | 732                |

### Solubility @ 25°C (77°F)g/100g

| Acetone    | 0.3  | Cyclohexane | 20.0 |
|------------|------|-------------|------|
| Benzene    | 14.7 | Hexane      | 25.0 |
| Chloroform | 45.0 | Toluene     | 30.0 |
| Corn oil   | 0.4  | Water       | <0.1 |

Note: Solutions may be cloudy.

Soluble in most common aprotic organic solvents

The information contained herein relates to a specific Addivant TM product and its use, and is based on information available as of the date hereof. Additional information relating to the product can be obtained from the pertinent Material Safety Data Sheets. Nothing in this Technical Data Sheet shall be construed to modify any of Addivant TM standard terms and conditions of sale under which the product is sold by Addivant NOTHING IN THIS TECHNICAL DATA SHEET SHALL BE CONSTRUED TO CONSTITUTE A REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE PRODUCT'S CHARACTERISTICS, USE, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY AND ALL SUCH REPRESENTATIONS AND WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. Nothing contained herein shall constitute permission or recommendation to practice any intellectual property without the permission of the owner.

Addivant<sup>TM</sup> and the Addivant<sup>TM</sup> logo are trademarks of Addivant<sup>TM</sup> Corporation or one of its subsidiaries.



## **Technical Information**

www.addivant.com

Effective: April 2013

#### **Product Features**

- Excellent color stability during processing, fabrication and end use
- Polymer protection from degradation during processing
- Reduced discoloration of polymers containing pigments such as TiO2
- Reduced discoloration of polymers that are stabilized with a sulfur-containing, nickelorganic complex and are processed at high temperatures
- Synergism when used with light stabilizers such as benzophenones and benzotriazoles
- High performance at low loading levels for more cost effective formulations

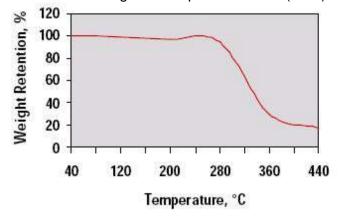
### **Food Contact Regulatory Status**

**WESTON**<sup>®</sup> **619F phosphite** complies with 21 CFR 178.2010 for use in many polymers. Also listed with Germany (BfR) and other EU member state regulations. Consult the regulations for limitations and restrictions before use.

For details please contact Addivant<sup>TM</sup> Regulatory Affairs Polymer Additives.

## **Volatility by Thermal Gravimetric Analysis**

Conditions: Nitrogen atmosphere @ 20°C (36°F)/minute.





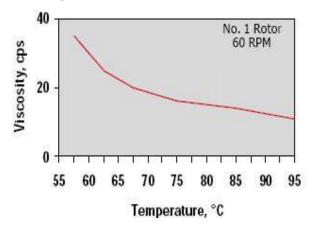
## **Technical Information**

www.addivant.com

Effective: April 2013

## Viscosity vs. Temperature WESTON® 619F phosphites tested in air.

Heating rate 5°C/minute



#### Storage and Handling

The product may be stored at least one (1) year in sealed containers. Containers should be stored in a cool, dry area. Extended storage at elevated temperatures or exposure to direct heat could decrease product shelf life. Containers should be kept sealed when not in use. Open containers should be used as soon as possible (maximum 4 months) to avoid hydrolysis, especially during humid weather.

For additional handling and toxicological information consult the Addivant<sup>™</sup> Material Safety Data Sheet.

The information contained herein relates to a specific Addivant TM product and its use, and is based on information available as of the date hereof. Additional information relating to the product can be obtained from the pertinent Material Safety Data Sheets. Nothing in this Technical Data Sheet shall be construed to modify any of Addivant TM standard terms and conditions of sale under which the product is sold by Addivant NOTHING IN THIS TECHNICAL DATA SHEET SHALL BE CONSTRUED TO CONSTITUTE A REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE PRODUCT'S CHARACTERISTICS, USE, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY AND ALL SUCH REPRESENTATIONS AND WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. Nothing contained herein shall constitute permission or recommendation to practice any intellectual property without the permission of the owner.

Addivant<sup>TM</sup> and the Addivant<sup>TM</sup> logo are trademarks of Addivant<sup>TM</sup> Corporation or one of its subsidiaries.