DOVERPHOS S-9228®

Solid Phosphite Antioxidant for Processing at Elevated Temperatures

Certified to NSF/ANSI 61

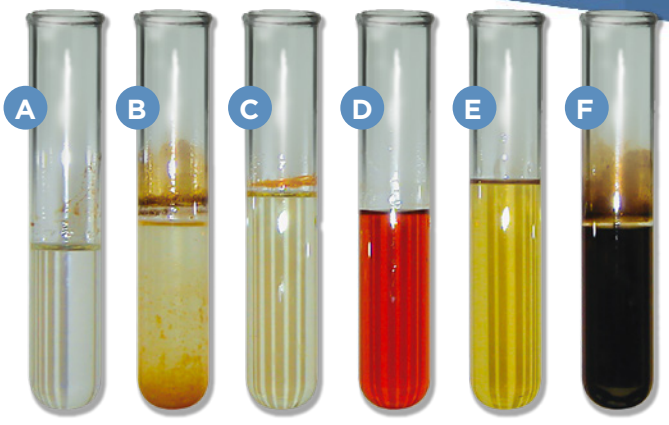
Doverphos S-9228 is a free-flowing, solid phosphite antioxidant developed by Dover Chemical Corporation. Doverphos S-9228 has excellent hydrolytic stability without the addition of inert products or triisopropanol amine. Doverphos S-9228 exhibits similar color performance as demonstrated by distearyl pentaerythritol diphosphite – Doverphos S-680 and other similar pentaerythritol diphosphites. Because of its high melting point, Doverphos S-9228 can be utilized in applications that require processing at elevated temperatures.

Doverphos S-9228 has broad, global food contact approvals* for most polymers. The oxidative and possible hydrolysis products are included on the European food registration, and therefore are considered non-NIAS (Non-Intentionally Added Substances).

*Please contact Dover Chemical Corporation for maximum limits for specific polymers

Product	Appearance	Melting Point, °C	Phosphorus, %	Volatility, % @ 105°C/2 hr.	Assay, %	Acid Number (mgKOH/gm)
Doverphos S-9228 Bis (2, 4-dicumylphenyl) pentaerythritol diphosphite	Off-white free-flowing powder	230	7.3	0.2	99.5	0.5
Doverphos® S-9228T Bis (2, 4-dicumylphenyl) pentaerythritol diphosphite plus triisopropanolamine	Off-white free-flowing powder	230	7.3	0.2	99.5	0.5
Doverphos S-9228PC Bis (2, 4-dicumylphenyl) pentaerythritol diphosphite	Off-white free-flowing granule	230	7.3	0.1	99.5	0.1
Also available in compacted forms: S-9228C, S-9228CT, and S-9228PCC						

Doverphos S-9228 compared to various commercial phosphites after heating at 280°C for 120 minutes.



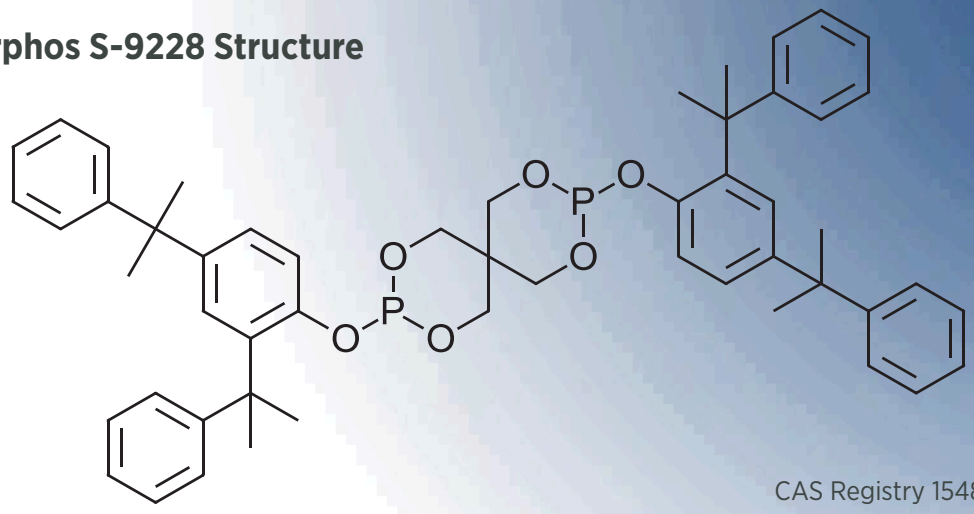
- **A** Doverphos **S-9228 Bis (2,4– di-cumylphenyl) pentaerythritol diphosphite. CAS registry No. 154862-43-8**
- **B** **Bis (2,4-di-t-butylphenyl) pentaerythritol diphosphite**
- **C** Doverphos **HiPure® 4 Trisnonylphenyl Phosphite**
- **D** **Phosphorus trichloride, reaction products with 1,1'-biphenyl and 2,4-bis (1,1-dimethylethyl) phenol**
- **E** **Tris (2,4-di-t-butylphenyl) phosphite**
- **F** **Bis (2,6-di-t-butylphenyl-4-methyl pentaerythritol) diphosphite**

For more information, visit us at www.doverchem.com
Toxicity and handling information is found on the Safety Data Sheet (available upon request)

DOVERPHOS S-9228

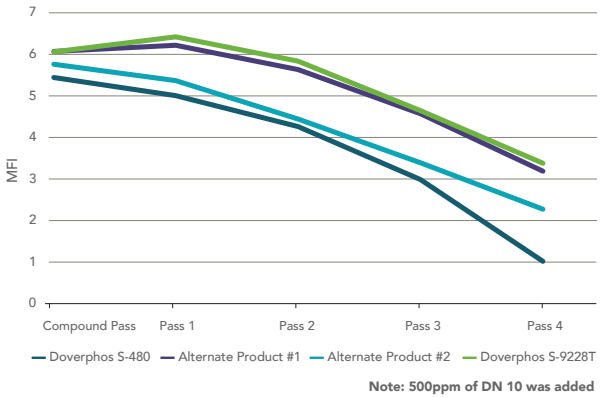
PERFORMANCE

Doverphos S-9228 Structure



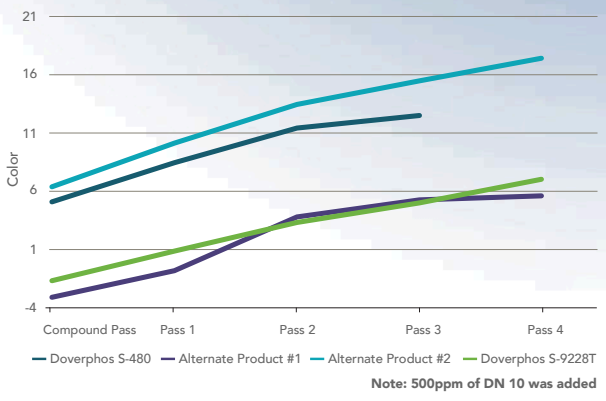
CAS Registry 154862-43-8

HDPE Melt Flow Index (190C, 21.6 kg)



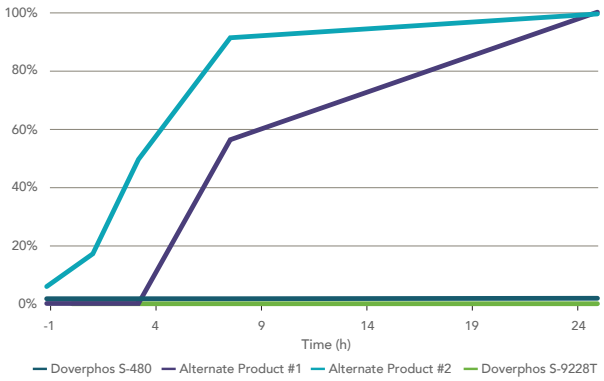
Note: 500ppm of DN 10 was added

Color (Yi)



Note: 500ppm of DN 10 was added

Rate of Hydrolysis (80C, 85% humidity)



LGP-11®, LUBE-BOOSTER®, MAYCO®, PAROIL®, SUL-PERM®, SYN-CHEK®, SYNKAD®, CHLOREZ®, CHLOROWAX 40®, CHLOROWAX 50®, DOVERNOX®, DOVERPHOS®, DOVERPHOS HIPURE®, and DOVERPHOS S-9228® are federally registered trademarks of Dover Chemical Corporation.

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