



CERTIFICATE OF ANALYSIS

To: VGP Holdings LLC
Address: 3901 River Road
Cincinnati, OH 45204
US
Plant: SAGT
Fax To:
Product: HiTEC ® 11192 Bulk
PO #: 4522592558
Order #: 0001409912
Expires: July 1, 2026

Material Number: 031546
Lot #: 0125SA001A
Scheduled Ship Date: February 10, 2025
Shipped Via:
Shipped From: RETL
Container Number: 20157
Manufacturing Date: JANUARY, 2025

HiTEC ® 11192 Bulk

Sales Specification Characteristics

Inspection	Note	Units	Methods	Min	Limits Target	Max	Actual
Calcium		%M	D4951	0.59	0.66	0.73	0.72
Molybdenum		%M	D4951	0.59	0.68	0.76	0.64
Nitrogen		%M	D5291 Mod	0.96	1.10	1.24	1.08
Phosphorus		%M	D4951	0.32	0.38	0.44	0.39
Zinc		%M	D4951	0.36	0.42	0.48	0.41
Flash Point, PMCC		°C	D93	135	-	-	155
Specific Gravity @ 15.6°C		-	D4052	0.932	0.947	0.962	0.948
Kinematic Viscosity @ 100°C		cSt	D445	44	55	66	54

Sales Notes

Additional Product Information

Handling Temperature:

Recommended storage and handling temperature: 40-50°C
Maximum storage temperature: 50°C
Maximum handling temperature (< 5 days): 70°C
Maximum skin temperature (agitated): 121°C
Shelf life @ 10-40°C: 18 months
Shelf life @ 45-50°C: 3 months
Typical Viscosity @ 40°C: 825 cSt
Typical TBN: 35 mg KOH/gr
Delta Gravity = 0.00064/°C

The product is prone to crystallization after remaining stationary for extended periods at ambient (~21°C) or lower temperatures. Warming to 40-50°C will dissolve the crystallization without adversely affecting product quality. Agitation while warming will expedite dissolution.

Comments:

Certification Date: 01/20/2025

Certified by: Melissa Williams

Questions about this shipment should be directed to Afton Chemical Corporation- Quality Control Lab: 1-800-224-3724

AftonChemical®, Greenburn®, HiTEC®, and mmt® are registered trademarks of Afton Chemical Corporation