



4119 White Bear Parkway, St. Paul, MN 55110 USA Phone: (651) 429-1100, Fax: (651) 429-1122 Toll Free: (800) 4-CORTEC, E-mail: info@cortecvci.com cortecvci.com • corteclaboratories.com

Evaluation of AGIP ALISMA 32 PV

To: Dario Dell'Orto

From: Cortec Corporation Laboratories

4119 White Bear Parkway

St. Paul, MN 55110

cc: Boris Miksic

Anna Vignetti Cliff Cracauer Eric Uutala

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Test conducted by:

Brian Benduha Lab Technician

Approved by:

Margarita Kharshan Laboratory Director

M. Rharshow

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Background: AGIP ALISMA 32 PV is a lubricant/oil used for turbines.

Purpose: To test the contact and vapor phase corrosion protection properties of

AGIP ALISMA 32 PV, and compare the results against VpCI-329.

Method: 1) ASTM D-1748 (humidity testing)

2) MIL-PRF-46002C (vapor phase testing)*

*Cortec Laboratory is not accredited for the test marked

Materials: 1) AGIP ALISMA 32 PV

2) VpCI-329 (batch #06651)

3) Carbon Steel panels, SAE 1010

Procedure: The following procedure was followed for the humidity testing:

- 1) Dip, or coat carbon steel panels with the samples to be tested.
- 2) Hang the panels to drip/dry overnight.
- 3) Place the panels in the humidity cabinet and inspect them for corrosion on a regular basis.
- 4) Record the number of hours for the panels to fail. Failure is determined by observing one spec of corrosion that is 1-3mm in diameter, or three specs of corrosion at least 1mm in diameter.
- 5) After 300 hours, the panels were removed from the humidity cabinet, hung to dry, and then photographed.

The following procedure was followed for MIL-PRF-46002C vapor phase testing:

- 1) Refer to part 4.2.2.2.2 of the MIL spec. for vapor phase testing.
- 2) VpCI-329 and AGIP ALISMA 32 PV are considered to be grade 1 oils.
- 3) Failure is determined by observing at least three specs of corrosion greater than 1mm in diameter.

Results: The following results were found for the humidity testing:

| Sample | Time to Failure |
|-------------------|-----------------|
| AGIP ALISMA 32 PV | <24 hours |
| VpCI-329 | Did not fail* |

^{*}tested for 300 hours

The following results were found for MIL-PRF-46002C vapor phase testing:

| Sample | Results |
|-------------------|---------|
| AGIP ALISMA 32 PV | Fail |
| VpCI-329 | Pass |

Interpretations: AGIP ALISMA 32 PV was found to have very poor contact and vapor phase corrosion protection properties, especially when compared to VpCI-329.

Photos:

Humidity Testing after 300 hours





AGIP ALISMA 32 PV