



**K** alchem International, Inc  
Compounding Chemicals You Can Trust

<b>PRODUCT:</b>	<b>PONAZURIL</b>	<b>EXPIRATION DATE:</b>	<b>01/2022</b>
<b>FINISHED LOT NO:</b>	<b>ASA001024A</b>	<b>MFG DATE: UPDATED BUD</b>	<b>02/2019</b>
<b>CAS#</b>	<b>69004-04-2</b>	<b>SPECIFICATIONS:</b>	<b>IH</b>
<b>MANUFACTURE:</b>	<b>ALIVIRA</b>	<b>COUNTRY OF ORIGIN:</b>	<b>INDIA</b>

## Certificate of Analysis

<b>TEST CRITERIA</b>	<b>SPECIFICATIONS</b>	<b>RESULTS</b>
<b>DESCRIPTION</b>	<b>White to almost white powder.</b>	<b>White powder</b>
<b>IDENTIFICATION By IR</b>	<b>The infrared absorption spectrum is concordant with spectrum obtained from standard.</b>	<b>Complies</b>
<b>IDENTIFICATION By HPLC</b>	<b>The retention time of the sample corresponds to that of retention time of standard as obtained in assay by HPLC</b>	<b>Complies</b>
<b>SOLUBILITY</b>	<b>Sparingly soluble in Ethyl Acetate</b>	<b>Complies</b>
<b>APPEARANCE OF SOLUTION</b>	<b>The solution is clear and not more intensely colored than B7 and Y7</b>	<b>Complies</b>
<b>LOSS ON DRYING</b>	<b>Not more than 1.00%</b>	<b>0.14%</b>
<b>WATER CONTENT</b>	<b>Not more than 0.50% w/w</b>	<b>0.35%</b>
<b>RESIDUE ON IGNITION</b>	<b>Not more than 0.10% w/w</b>	<b>0.03%</b>

<b>HEAVY METALS</b>	<b>Not more than 10 ppm</b>	<b>Complies</b>
<b>RELATED SUBSTANCES BY HPLC</b> <b>Toltrazuril Sulfoxide</b> <b>N-Methyl Toltrazuril Sulfoxide</b> <b>N-Methyl Toltrazuril Sulfone</b> <b>Toltrazuil</b> <b>Any individual impurity</b> <b>Total impurities</b>	<b>Not more than 0.50%</b> <b>Not more than 0.20%</b> <b>Not more than 0.20%</b> <b>Not more than 0.50%</b> <b>Not more than 0.20%</b> <b>Not more than 1.0%</b>	<b>0.12%</b> <b>Not detected</b> <b>Not detected</b> <b>Not detected</b> <b>0.07%</b> <b>0.32%</b>
<b>ASSAY by HPLC (On dried basis)</b>	<b>Between 98.0% to 102.0%</b>	<b>99.2%</b>
<b>ACETIC ACID CONTENT BY HPLC</b>	<b>Not more than 1000 ppm</b>	<b>44 ppm</b>
<b>Residual Solvents (By GC)</b> <b>Dimethyl sulphoxide</b> <b>Methanol</b> <b>Benzene</b>	<b>Not more than 5000 ppm</b> <b>Not more than 3000 ppm</b> <b>Not more than 2 ppm</b>	<b>Not detected</b> <b>26 ppm</b> <b>Not detected</b>
<b>Conclusion: as per In- House specifications. (PNZF/01A/FP/R1)</b>		

**DATE OF RELEASE:** \_\_\_\_\_ **ANALYSIS #** \_\_\_\_\_

**APPROVED BY/ DATE:** \_\_\_\_\_

**Kalyn R Tabor, Quality Control**