Corrosion poses a major risk to many industrial facilities and structures such as pipelines, storage tanks, boilers, heat exchangers, and other equipment and systems. To estimate the design life or residual life of an industrial component, corrosion rate data for a given material-environment system must be known. WebCorr’s corrosion prediction software and corrosion modeling software can provide essential corrosion rate data to your design team and maintenance personnel, making possible a more realistic estimation of the design life or residual life of your facilities, structures or equipment in various industries.

Why You Should Consider WebCorr
WebCorr Corrosion Consulting Services is in the corrosion consultancy business. Corrosion prediction and corrosion control software tools and services are essential for life cycle cost considerations of your facilities and structures.

CO2Compass Accurately Models the Effects of Critical Parameters on CO2 Corrosion and Recommends Practical Solutions.
We are a ship-owner with a fleet of stainless steel ocean-going tankers.

Our ships carry Phosphoric Acid cargo from time to time. We would like to know whether a particular grade of Phosphoric Acid is suitable for our stainless steel tankers. We are not able to provide the phosphoric acid sample to you. However we can provide the specifications of phosphoric acid to you. For example:

\[
\begin{align*}
P_2O_5 & \quad 49.0 - 51.0 \\
\text{Sp. Gr} & \quad 1.65 - 1.67 \\
Fe_2O_3 & \quad \text{min 0.65 pct} \\
Al_2O_3 & \quad \text{min 0.8 pct} \\
MgO & \quad 0.45 - 0.55 \\
CaO & \quad 0.15 - 0.25 \\
K_2O & \quad 0.06 - 0.08 \\
Na_2O & \quad 0.7 - 0.95 \\
SO_4 & \quad \text{max 4.0 pct} \\
F & \quad \text{max 0.8 pct} \\
Cl & \quad \text{max 200 ppm} \\
\text{Solids} & \quad \text{max 1.0 pct} \\
\text{Temp max 45 deg C} \\
\text{Total voyage time about 12-15 days.}
\end{align*}
\]

Question – can this grade of Phosphoric Acid be carried on our ship cargo tanks made of 316L 2.1% Mo and of 316L 2.7% Mo?

If it cannot be carried because of certain parameters out of limits, please advise the max limits allowed and if the temp is too high, what the max temp allowed?