

## Application notes innovaProtect Corrosion prevention and heat transfer concentrate

innovaProtect is a concentrate for protection against corrosion in closed cooling systems. For correct application read the following notes carefully.

### **Basic Information:**

The protection additive is a clear liquid with a boiling-point of 165 °C. The PH value of the concentrate is about PH 7-8. Mixed to the final coolant the PH value results in 8-9. The flash point lies above 100 °C. The concentrate smells only weakly.

### **Application:**

innovaProtect may only be used mixed in distilled water. It may not be used below the necessary minimum concentration of 25%. The maximum additive concentration is 55%. If possible, the minimum concentration value should be kept, since the cooling performance is optimum for this mixture. For use mix one bottle of the concentrate (250 ml) with 0.75 l of distilled water and fill the mixture into the cooling circuit. For optimum stability of the mixture it is recommended to rinse the water circuit thoroughly with distilled water before. InnovaProtect may not be mixed with other liquids (such as dyes or other coolants). The corrosion inhibitor may only be used in closed circuits. If used a small temperature increase is normal due to physics. By application of innovaProtect also mixed cooling circuits composed of Cu (copper) and Al (aluminum) devices are reliably protected from corrosion, in case no additional potentials (voltages) are applied. Determination of the concentration can be done by an areometer. The measured value ranges between 1.037 for 25% and 1.0789 for 55% concentration. Alternatively the concentration can be determined with a refractometer. Refraction indices: 1.3599 for 25% and 1.3918 for 55% concentration.

### **Environmental protection:**

The concentrate is free of nitrite, phosphate, and amine. It is bio-degradable. When correctly disposed into adapted biological sewage plants, no disturbance of the degradation activity is expected.

### **Storage:**

The concentrate is durable in air-tight containers for at least 3 years. Storage should be in the original bottle.

### **Handling:**

For application the necessary measures of safety and work sanitary for handling of chemicals as well as all common regulations have to be followed. A safety data sheet according to EC regulation 91/155/EWG is available.

### **Precautions:**

Contains: 1,2- ethane diol

R22: Detrimental to health when swallowing

S2: Must not get into the hands of children

S24/25: Avoid contact with skin, in case of unintentional contact thoroughly rinse skin with water.

S46: If swallowed immediate medical advice is necessary. This application note has to be shown.

No hazardous good according to GGVS/GGVE