Ethylene Glycol Solutions Chart

Ethylene glycol, anhydrous, 99.8% | HOCH2CH2OH | 1,2 ...

For many heat-transfer applications it is necessary to use a heat-transfer fluid with lower freezing point than water. The most common antifreeze fluid - ethylene glycol - must not be used where there is a chance of leakage to potable water or food processing systems. In food processing systems the common heat-transfer fluid is based on propylene glycol.

Engineering and Operating Guide for DOWTHERM SR-1 and ...

Glycol Heat-Transfer Fluids Ethylene Glycol versus Propylene Glycol Water is probably the most efficent heat-transfer fluid known. If it did not freeze, water would be the ideal heat-transfer fluid for cooling applications. When freeze conditions exist (<35 F), ethylene glycol and propylene glycol can be added to water to provide

Glycol Heat-Transfer Fluids Ethylene Glycol versus ...

Ethylene glycol based solutions work well in most anti-freeze applications because of their excellent heat transfer efficiency. The low viscosity of ethylene glycol allows systems to operate at lower minimum temperatures and is more energy efficient due to its reduced pumping requirements.

Specific Gravity Charts

Material Safety Data Sheet. The handling of this chemical may incur notable safety precautions. It is highly recommend that you seek the Material Safety Datasheet for this chemical from a reliable source and follow its directions.Science Stuff

Ethylene glycol (data page) - Wikipedia

PROPYLENE GLYCOL - WATER SOLUTION SPECIFIC GRAVITY, CONCENTRATION AND FREEZING POINT CHART Specific Gravity – SG 60ºF 1.000 1.008 1.017 1.026 1.034 1.041 1.046 Propylene Glycol Solution % by mass 0 10 20 30 40 50 60 by volume 0 10 19 29 40 50 60 ... and Freezing Point

Chart.

Propylene Glycol based Heat-Transfer Fluids

ETHYLENE GLYCOL HYDROMETER SCALE - For cooling systems larger than shown, use double the quantity of antifreeze/coolant required for a system one-half as large. For systems smaller than shown, use half the quantity of antifreeze/coolant required for a system twice as large. Ethylene Glycol-Based Engine Antifreeze/Coolant Protection Chart

Freezing Points of Ethylene Glycol Mixtures

Glycol Percentage Relative to Freeze Point Propylene Glycol www.ClenAir.com Freezing Point Propylene Glycol Solution (%) 0% 10% 20% 30% 40% 50% 60% Glycometer™ Temperature (F)° 32° 26° 18° 7° (-8°) (-29°) (-55°) Ethylene Glycol

Ethylene Glycol-Based Engine Antifreeze/Coolant Protection ...

ethylene glycol-based fluids Solutions of DOWTHERM ethylene glycol-based fluids are widely used for secondary cooling and heating applications, for freeze and burst protection of pipes, and for various deicing, defrosting, and dehumidify-ing applications. They contain specially formulated packages of industrial inhibitors that help prevent ...

Ethylene Glycol Solutions Chart

Ethylene Glycol based water solutions are common in heat-transfer applications where the temperature in the heat transfer fluid can be below 32 o F (0 o C).Ethylene glycol is also commonly used in heating applications that temporarily may not be operated (cold) in surroundings with freezing conditions - such as cars and machines with water cooled engines.

Tetraethylene Glycol - Dow

You may remember that about 93% of most coolant is ethylene glycol, another few percentage points are water and/or a solvent to keep rust/corrosion inhibitors in solution and the remainder are those inhibitors. The inhibitors make a huge difference, and they're what all the arguments are about. Didn't we talk about all these coolants last year?

ETHYLENE GLYCOL (INTERCOOL OP-100)

Freezing Points of Propylene and Ethylene Glycol Solutions. Printable View « Go Back. Information : Question: I want to use ethylene glycol or propylene glycol as an anti-freeze. What are the freezing points of various aqueous solutions of these chemicals? Answer: The freezing points of these glycol solutions can be found in the tables below:

Typical Freezing and Boiling Points of Aqueous Solutions ...

Ethylene glycol may also be one of the minor ingredients in screen cleaning solutions, along with the main ingredient isopropyl alcohol. Ethylene glycol is commonly used as a preservative for biological specimens, especially in secondary schools during dissection as a safer alternative to formaldehyde. It is also used as part of the water-based ...

Ethylene glycol - Wikipedia

Glycol Correction Factors All Heat exchangers experience a capacity loss when the fluid is a higher specific gravity than water. Glycols are heavy, syrup like fluids at full concentration, and become thinner when mixed with water. However, the mixed solution of water-glycol will be thicker, heavier, than the water alone was.

Ethylene Glycol Heat-Transfer Fluid - Engineering ToolBox

An ethylene glycol freezing point chart shows the freezing point of a solution consisting of ethylene

glycol and another fluid. The most common example of such a solution is the antifreeze solution used in automobiles.

Propylene Glycol – Water Solution Specific Gravity ...

Tetraethylene Glycol Solutions at Various Pressures . . . . . 10 Figure 4 Vapor Pressures of Tetraethylene Glycol at Various Temperatures . 11 ... Figure 16 Conversion Chart for Aqueous Solutions of Tetraethylene Glycol . . 23 ... ethylene oxide and glycols with more than 70 years of experience in their manufacture,

Anti-Freeze in Hydronic Systems - Raypak

Densities of aqueous solutions of Ethylene glycol (EG), diethylene glycol (DEG), and triethylene glycol (TEG) were measured at temperatures from 293.15 to 318.15 K and molalities ranging from 0.0488 to 0.5288 mol·kg−1. Volumes of all investigated solutions at a definite temperature were linearly dependent on the solute molality; from this dependence the partial molar volumes at infinite ...

What Is an Ethylene Glycol Freezing Point Chart ...

ETHYLENE GLYCOL (INTERCOOL OP-100) ... the freeze point of ethylene or propylene glycol solutions. 7. Why not use automotive antifreeze? The inhibitors in automotive antifreeze are not designed for extended service and cannot be replenished. Additionally, silicated fluids may cause gels in your fluid. Also, the inhibitors are not compatible ...

Glycol Percentage Relative to Freeze Point

Typical Freezing and Boiling Points of Aqueous Solutions of DOWTHERMTM SR-1 and DOWTHERMTM 4000† Dow Heat Transfer Fluids Freezing Point Wt % Ethylene Glycol Vol % Ethylene Glycol

Freezing Points of Propylene and Ethylene Glycol Solutions
CONVERSION CHARTS ETHYLENE GLYCOL & PROPYLENE GLYCOL The Conversion Charts below are to be used with the PPE Precision Specific Gravity Hydrometer and Beaker. After placing a sample of the glycol in the beaker, check the reading on the hydrometer and match it to the appropriate chart to accurately determine the Glycol to water weight percentage.

Glycol Correction Factors - American Chillers and Cooling ...
General description Ethylene glycol is the major component of antifreeze preparations. Application Ethylene glycol may be used in the preparation of spiroborate esters by reacting with chiral 1,2-aminoalcohols in the presence of triisopropyl borate.