



## THE ULTIMATE PROTECTION FOR YOUR CHILLED WATER SYSTEMS

The use of an inhibited glycol is required in most industrial chiller systems to reduce the freezing temperature of water and maintain consistent water-flow at the operating temperature.

Monarch's MonCool inhibited glycol range is a multi-metal protection agent, capable of reducing the formation of scale and corrosion whilst providing first-rate freeze protection in a variety of environments. Specific inhibitors that have been independently tested are added to the glycols that minimise the formation of scale and help protect metals such as brass, copper, mild steel, stainless steel and aluminium from corrosion.

### Why can I not just use tap water?

Tap water is supplied in a condition that is suitable to drink immediately. No chemical treatment has been applied to counteract the chemical conditions of the water, such as scale formation and corrosion, which will affect water systems.

If the system operates outdoors, or at low temperatures in refrigeration/cooling systems, it is normally necessary to add chemicals to prevent the water freezing and damaging the system.

**Our MonCool range achieves all these goals.**

### Can MonCool be mixed with other products in my system?

We do not recommend that you mix different types/brands of glycols in your cooling systems. Mixing glycols can cause the products to gel and clog your filters and may reduce flow rates.

You should always flush through your system with an appropriate cleaning chemical when changing products. This also helps to remove any build-up of glycol degradation materials in your system.

We always recommend using **MonCool SC** for flushing and cleaning systems prior to changing products.





## WHICH MONCOOL IS RIGHT FOR YOU

Monarch offers two options of MonCool; MonCool P430 Inhibited Propylene Glycol and MonCool E860 Inhibited Ethylene Glycol.

### **MONCOOL**

#### **P430** INHIBITED PROPYLENE GLYCOL

Generally maintains the same freeze protection levels as ethylene glycol but has a lower level of toxicity.

Preferable if potential 'incidental' food contact is a concern

| Freezing Point (°C) | Wt % Propylene Glycol | Vol % Propylene Glycol |
|---------------------|-----------------------|------------------------|
| -12.7               | 30%                   | 29.4%                  |
| -16.4               | 35%                   | 34.4%                  |
| -21.1               | 40%                   | 39.6%                  |
| -26.7               | 45%                   | 44.7%                  |
| -33.5               | 50%                   | 49.9%                  |
| -41.6               | 55%                   | 55.0%                  |

### **MONCOOL**

#### **E860** INHIBITED ETHYLENE GLYCOL

Can be used in any application where a low toxicity content is not required.

Should not be used in processes where it could come in contact with potable water, food or beverage products.

| Freezing Point (°C) | Wt % Ethylene Glycol | Vol % Ethylene Glycol |
|---------------------|----------------------|-----------------------|
| -12.7               | 30%                  | 27.7%                 |
| -16.4               | 35%                  | 32.6%                 |
| -21.1               | 40%                  | 37.5%                 |
| -26.7               | 45%                  | 42.5%                 |
| -33.5               | 50%                  | 47.6%                 |
| -41.6               | 55%                  | 52.7%                 |

## PRODUCT OPTIONS

Blue dye variant: Both products can be coloured with food grade blue dye by request for easy identification should your system suffer a leak or failure.

Ready to use: Monarch can supply these products in a ready to use format. Simply tell us the freeze protection temperature you want to achieve and we will formulate this for you.