

# **RAVENOL FGA Foodgrade Antifreeze Concentrate**

RAVENOL FGA Foodgrade Antifreeze Concentrate is an inhibited propylene glycol specialist fluid for use in HVAC (heating, ventilation, air conditioning) systems, industrial heat transfer systems, food industry chilling and freezing systems.

RAVENOL FGA Foodgrade Antifreeze Concentrate Inhibited Propylene Glycol provides superior corrosion protection. Its inhibitor package minimises effects of corrosion by buffering the organic acids that form during normal system operation. Plain water and uninhibited glycols are notorious for their corrosive attack on many metals.

NSF Nonfood Compounds Program Listed HT1: Registration No. 142387

### **Application Notes**

## Typical Uses of RAVENOL FGA Foodgrade Antifreeze Concentrate:

- Prevents freeze burst problems in schools, offices, vacant property, caravans etc. Safeguards HVAC system lines down to temperatures of 50°C.
- · Protects water systems in marine and recreational vehicles freezing and bursting. Protects Industrial pre-heating coils during severe conditions.
- · Provides improved heating and cooling efficiency for hospitals and industrial units
- Extends the temperature range of water for both low and high temperature industrial testing baths.
- · Is an excellent chilling medium for ice skating rinks and heating medium for ice snow melting and removal systems.

RAVENOL FGA Foodgrade Antifreeze protects your systems down to -50°C. Eliminate the cost and nuisance associated with freeze damage.

RAVENOL FGA Foodgrade Antifreeze Concentrate solutions can protect systems down to a temperature of - 50°C preventing cracked pipes, broken valves and coils and other freeze damage associated with the use of plain water.

Adding RAVENOL FGA Foodgrade Antifreeze Concentrate gives you system superior freeze protection.

#### Mixture Table:

Temperature °C	% v/v Concentrate required for Freeze Protection	% v/v Concentrate required for Burst Protection
-6	17	11
-12	26	18
-18	34	23
-24	41	28
-29	45	30
-35	49	33
-40	51	35
-46	53	35
-51	55	35

### Why not use Automotive Antifreeze?

Automotive Antifreeze can be worse than plain water and uninhibited Glycols for heat transfer systems. Many modern Antifreezes contain silicate based inhibitors which coat heat exchange surfaces reducing their efficiency and have a tendency to gel thus fouling systems and reducing the life of pump seals. Additionally most Antifreezes are Ethylene Glycol based which is toxic by ingestion to humans and animals.

N.B. RAVENOL FGA Foodgrade Antifreeze Concentrate is not recommended for use with Galvanised steel. The zinc in the galvanised coating could react with inhibitor components, thus precipitating out of the fluid resulting fouling as well as inhibitor depletion Secondary Heat Transfer

Adding RAVENOL FGA Foodgrade Antifreeze Concentrate significantly lowers your system maintenance requirements and increases its heat transfer fluid life expectancy thus securing your equipment investment.

## **Quality Classifications**

RAVENOL FGA Foodgrade Antifreeze Concentrate is approved, tried and tested for aggregates specifying:

# Characteristic

RAVENOL FGA Foodgrade Antifreeze Concentrate offers:

- Corrosion Protection: Prolong the life of your capital plant by protecting against the corrosive attack of water and uninhibited glycols.
- Secondary Heat: Transfer. Reduce your system maintenance and extend the life expectancy of your heat transfer fluid.
- Instructions for Use: It is strongly recommended that in areas of hard water RAVENOL FGA Foodgrade Antifreeze Concentrate is diluted with demineralised or deionised water, as dissolved minerals in hard water can react with the inhibitors and precipitate out of solution.
- Safety: Safety must always come first for HVAC, industrial heat transfer, and chilling and refrigeration plants. Propylene Glycol on which RAVENOL FGA Foodgrade Antifreeze Concentrate is based is recognised for its low toxicity and may be handled safely by individuals maintaining heat transfer systems.
- Propylene Glycol may be used in food at levels not to exceed good manufacturing practise. Additionally all additives used in RAVENOL FGA Foodgrade Antifreeze Concentrate are foodgrade materials.

All information correspond to the best of our knowledge to the actual situation of the cognitions and our development. Subject to alterations. All references made to DIN-norms are only for the description of the goods. There is no guarantee. In case there will be any problems please contact the technical service.

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