



A System For Success



NOBURST is a non-toxic* antifreeze and heat transfer fluid. The product is to be used in place of water and other water-like fluids in systems where freezing may either cause damage or interfere with the functioning of systems or equipment and/or toxicity to humans or animals is a concern. NOBURST is for use in contact or potential contact with potable water.

Sizes:

- NOBURST is available in:
- 1 gallon plastic bottles (6 per case)
- 5 gallon plastic pails
- 30 gallon plastic drums
- 55 gallon plastic drums
- 5000 gallon tank trucks

Color:

NOBURST is reddish/pink

NOBURST Applications include:

- Hydronic heating system
- Solar heating
- Ground water and earth coupled heat pumps
- Amana HTM (and other "air hydronic") heat pumps and furnaces
- Water-based heat extraction systems
- Cooling systems and chillers
- Refrigerating systems
- Pipe tracing
- Cooling towers
- Industrial heat transfer
- Plumbing winterization
- Ice making machines
- Snow melting systems
- Fire hydrant winterization
- Cooling coil defrosting
- Immersion freezing
- Infloor heating

Ingredients:

- Active Ingredient: Propylene Glycol
- Corrosion Inhibitor: Dipotassium Phosphate
- Other Ingredients: Viscosity reduction agent
Food, Drug, and Cosmetic Grade red dye
Water
Defoaming Agent

Heat Transfer Properties:

- Specific Heat Capacity at 160°F:
100% NOBURST: 0.787 cal./g/°C
75% NOBURST: 0.870 cal./g/°C
50% NOBURST: 0.937 cal./g/°C
- Thermal Conductivity at 160°F:
100% NOBURST: 0.165 BTU/Hr-ft(2)/(F/ft)
75% NOBURST: 0.205 BTU/Hr-ft(2)/(F/ft)
50% NOBURST: 0.258 BTU/Hr-ft(2)/(F/ft)

| | Relative System Efficiency ² | Thermal Conductivity BTU/HR/FT/°F) | Viscosity (Centipoises) | Foam Character | Cold Protection Level (F°) |
|------------------------------|---|------------------------------------|-------------------------|----------------|----------------------------|
| Water | 1.000 | 0.35 | 0.42 | None | +32° |
| Noburst—100 | | | | | |
| 50% | 0.930 | 0.270 | 1.00 | None | -60° |
| 75% | 0.833 | 0.223 | 1.50 | None | -80° |
| 100% | 0.799 | 0.170 | 2.50 | None | -100° |
| Ethylene Glycol ³ | | | | | |
| 50% | 0.896 | 0.237 | 1.40 | Slight | -34° |
| 75% | 0.772 | 0.183 | 2.75 | Slight | -60° |
| 100% | 0.693 | 0.151 | 5.00 | Slight | +5° |
| Silicone | | | | | |
| SylTherm 444 ⁴ | 0.351 | 0.082 | 9.86 | Slight | -121° |
| SylTherm 800 ⁴ | 0.369 | 0.074 | 5.00 | Slight | -40° |
| Synthetic | | | | | |
| Hydro-Carbon ⁵ | 0.475 | 0.070 | 11.69 | High | -40° |
| Terephenyl ⁶ | 0.409 | 0.0677 | 9.86 | Very High | -20° |

1. Table data obtained from Dow Chemical Company, Noble Company
2. System efficiency as a function of specific heat and fluid density with no change in fluid flow rate.
3. Data is for DowTherm brand Ethylene Glycol, trademark and product of the Dow Chemical Company.
4. SylTherm is a trademark and product of Dow-Corning Corporation
5. Data is for H-30 a product of Mark Enterprises.
6. Data is for Thermal 66 Modified Terphenyl, a product of Monsanto Industrial Chemicals Company.

Chemical and Physical Properties:

- Density at 72°F:
100% NOBURST: 1.055
75% NOBURST: 1.050
50% NOBURST: 1.035
- Viscosity at 160°F:
100% NOBURST: 2.60 centipoise
75% NOBURST: 1.70 centipoise
50% NOBURST: 0.9 centipoise
- pH of NOBURST solutions: 8.0 to 9.6
- Boiling Point at Atmospheric Pressure (760 mm):
100% NOBURST: 238°F
75% NOBURST: 224°F
50% NOBURST: 218°F
- Boiling Point at 2 Atmospheres (1520 mm):
100% NOBURST: 278°F
75% NOBURST: 251°F
50% NOBURST: 246°F