

# Driver Antifreeze SX-D 13

Antifreeze, Si-OAT-coolant additive concentrate (colour: pink / violet)

## Description:

**Driver Antifreeze SX-D 13** is an ethanediol (ethylene-glycol, MEG) based full concentrate which acts as antifreeze and heat transfer medium for the summer and winter operation, which enables the maintenance-free protection against frost, overheating and rust formation.

**Driver Antifreeze SX-D 13** is a Lobrid product, which means that it is formulated on the basis of organic inhibitors in combination with inhibitors of mineral (silicate). Therefore, it provides not only maintenance-free protection against freezing and cooking, but also long-term protection against corrosion (Si-OAT-coolant).

**Driver Antifreeze SX-D 13** is borate, nitrite, amine and phosphate free.

## Properties:

- Long-life radiator protection
- Excellent heat transfer
- Forms a constant homogeneous protective layer
- Protection of all metals, including aluminum, due to highly effective additives
- Silicate stabilised, i.e. no gel formation or flocculation
- Environmentally friendly due to the non-use of borates, nitrites, amines and phosphates

## Application:

**Driver Antifreeze SX-D 13** can be used without restriction in motors of cast iron, aluminum, or a combination of both metals in cooling systems made of aluminum or copper alloys.

**Driver Antifreeze SX-D 13** is particularly recommended for aluminum engines, where a special protection at higher temperatures is required.

Recommended concentration is 50% **Driver Antifreeze SX-D 13** and 50% water, with a frost protection of -35 ° C is reached.

Mixtures with more than 70 vol. % are not recommended as the maximum achievable frost protection (-69 ° C) is reached at 68 vol. %.

Special attention must be paid to the measurement of the freezing point.

Refractometers are often used to determine the freezing point. In the case of **Driver Antifreeze SX-D 13** this measurement leads to incorrect results. This is due to the glycerol content in the coolant.

Due to the MEG scale of the refractometer the test method described in the ASTM D3321 leads to an incorrect assessment.

In the following table is listed for various dilutions, the measurement data and readings of each corresponding density, the refractive index, and the reading of the Refraktometer \*.

The table also shows the different results to the two standard methods of measuring antifreeze ASTM D3321 and ASTM D 1177.

## Suitable for/ we recommend this product for:

|  |                |
|--|----------------|
| We recommend this product for:                     |                |
| ASTM   | D 3306 Type V  |
| AUDI, (BENTLEY, BUGATTI, LAMBORGHINI), SEAT, SKODA | G 13           |
| BS   | 6580 : 2010    |
| VW   | TL 774 J (G13) |

## Miscibility:

- **Driver Antifreeze SX-D 13** is miscible with most coolants based on ethylene glycol. For optimum corrosion protection and effect of inhibitors the use of pure **Driver Antifreeze SX-D 13** is recommended.

**Driver Antifreeze SX-D 13**

| Article No. | Packaging unit |         |
|-------------|----------------|---------|
| 1410 222    | Can            | 1 L     |
| 1410 223    | Can            | 1500 ml |
| 1410 224    | Can            | 5 L     |
| 1410 225    | Can            | 20 L    |
| 1410 226    | Drum           | 60 L    |
| 1410 228    | Drum           | 200 L   |
| 1410 229    | PE-Container   | 1000 L  |

**Typical characteristics:**

|                                    |                   |               |
|------------------------------------|-------------------|---------------|
| Specific weight at 20°C            | kg/m <sup>3</sup> | 1,140         |
| Boiling point                      | °C                | >170          |
| ph-Value (20°C)                    |                   | 8,6           |
| Pour point antifreeze/water=1:1 °C |                   | -35           |
| Glycerol                           | %                 | Max. 20       |
| Reserve alkalinity                 |                   | 5,7           |
| Colour                             |                   | pink (violet) |

