## ALPINE ${ }^{\circledR}$ C13

## Premium Lobrid coolant violet

## Properties

## Application notes

ALPINE C13 is a premium antifreeze based on ethylene glycol, free of potentially harmful substances such as nitrites, amines and phosphates. Due to an optimal combination of OAT and silicate technology as well as high-performance additives, ALPINE C13 offers excellent corrosion and cavitation protection for the longest possible coolant service life. Further additives prevent the coolant from foaming and prevent deposits. ALPINE C13 offers yearround frost and corrosion protection that is maintenance-free over the entire service life of the engine. The coolant has no negative influence on coolant hoses or cylinder head gaskets.

ALPINE C13 mixed with the corresponding quantity water (distilled water) is used as a coolant and heat transfer fluid in modern combustion engines, whether engines made of cast iron, aluminium or a combination of both metals and in cooling systems made of aluminium or copper alloys. ALPINE C13 is especially recommended for light metal engines where special aluminium protection is required at higher temperatures.
An application concentration of 50 vol. \% is recommended all year round.
ALPINE C13 can be mixed with most ethylene glycol-based coolants.

Caution: Observe manufacturer's instructions.

## Service description

## Recommendation*:

- VW TL 774 J
- Audi
- Bentley
- Lamborghini
- Seat/Skoda

| ALPINE C13 parts | Water parts | Anti-frost up to: |
| :---: | :---: | :---: |
| 1 | 2 | $-18^{\circ} \mathrm{C}$ |
| 1 | 1,5 | $-24^{\circ} \mathrm{C}$ |
| 1 | 1 | $-36^{\circ} \mathrm{C}$ |


| TYPICAL PARAMETERS | METHODS | UNITS | ALPINE C13 |
| :--- | :--- | :---: | :---: |
| Density at $20^{\circ} \mathrm{C}$ | ASTM D 4052 | $\mathrm{g} / \mathrm{cm}^{3}$ | 1.119 |
| Reserve alkalinity (pH 5.5) | ASTM D 1121 | $\mathrm{ml} 0,1 \mathrm{n} \mathrm{HCl}$ | 6.5 |
| Boiling point | ASTM D 1120 | ${ }^{\circ} \mathrm{C}$ | $>170$ |
| pH value | ASTM D 1287 | - | $7.5-9$ |
| Flash point | DIN EN ISO 2592 | ${ }^{\circ} \mathrm{C}$ | $>111$ |
| Antifreeze at 50 vol. $\%$ | ASTM D 1177 | ${ }^{\circ} \mathrm{C}$ | -36 |
| Colour | - | - | violet |

