

# SUPER LONG LIFE ANTIFREEZE Red



## PRODUCT DESCRIPTION

TOTACHI SUPER LONG LIFE ANTIFREEZE Red is a coolant concentrate based on ethylene glycol. The product is developed in accordance with the requirements of the Japanese standard JIS K2234. TOTACHI SUPER LONG LIFE ANTIFREEZE Green is manufactured for preparation of coolants, used in TOYOTA Corporation vehicles, by diluting product with distilled/ deionized water. The product contains high concentration of carboxylate additives and phosphate-based inhibitors for maximum protection of cooling systems of most internal combustion engines, including those with aluminum alloys. In ready for use product it provides effective long-term protection of cooling system parts, protects engine from freezing, overheating, cavitation, corrosion and contamination. The formulation is free from silicates, nitrates, borates and amines. TOTACHI SUPER LONG LIFE ANTIFREEZE Red helps to reduce hard deposits and increase service life of water pumps.

## APPLICATION

- TOTACHI SUPER LONG LIFE ANTIFREEZE Red is recommended for cooling systems of gasoline and diesel engines of TOYOTA, Lexus and Daihatsu vehicles, which require the use of Toyota Super Long Life Coolant.
- TOTACHI SUPER LONG LIFE ANTIFREEZE Red is specially recommended for modern engines where the enhanced protection of aluminum against high-temperature corrosion is required.
- The product can be safely mixed with Genuine TOYOTA coolants.

- TOTACHI SUPER LONG LIFE ANTIFREEZE Red offers effective corrosion protection of engine parts made of iron (cast iron), aluminum, solders and copper alloys.
- TOTACHI SUPER LONG LIFE ANTIFREEZE Red has improved heat exchanging characteristics, which enhance performance of engines in highly loaded operating conditions.
- The product possesses excellent compatibility with seal materials and rubber hoses, typically used by Japanese OEMs.
- TOTACHI Super Long Life Coolant Red is designed for application in cooling systems of gasoline and diesel engines of leading Japanese car manufacturers: TOYOTA, Lexus, Scion and Daihatsu. Supports an extended service life of up to 5 years / up to 250,000 km during the initial filling (according to the TOYOTA recommendation with post-warranty service 3 years / up to 150,000 km).

## MEETS SPECIFICATIONS AND REQUIREMENTS OF:

- **ASTM D3306** for automotive services;
- **JASO M325**
- **TOYOTA TSK 26016**

Before using this product make sure, it is consistent with OEM's recommendations for the equipment operating conditions and customer's maintenance practices.

\* when diluting product with treated water in 50/50 or 60/40 ratio.

Do not use TOTACHI SUPER LONG LIFE ANTIFREEZE Red without prior dilution with specially treated water (distilled or deionized).

| Dilution ratio  |                     |       |
|-----------------|---------------------|-------|
| Chill point, C° | Coolant concentrate | WATER |
| -24             | 40%                 | 60%   |
| -37             | 50%                 | 50%   |
| -52             | 60%                 | 40%   |

It is not recommended to dilute the product with water for more than 70%. It is a good practice to flush cooling system before changing coolant.

For application in regions with mild climate use product with chill point of -37°C. For northern regions with severe cold climate use product with chill point of -52°C.

## CUSTOMER BENEFITS

**TYPICAL TEST DATA**

| CHARACTERISTICS   | UNITS                  | VALUE                              | METHOD              |
|---|------------------------|------------------------------------|---------------------|
| Appearance  |                        | Transparent liquid with no residue | P 5.2 TU            |
| Density at 20°C   | g/cm <sup>3</sup>      | 1.12                               | GOST 18995.1, Sec.1 |
| Swelling of rubber, no more than                                  | %                      | 5.0                                | GOST 9.030-7 Sec.1  |
| Alkalinity, no less than  | cm <sup>3</sup>        | 3.5                                | GOST 28084          |
| Chill point   | °C                     | -50                                | GOST 28084 n 4.4    |
| Foaming:<br>– Volume of foam after 5 minutes;<br>– Foam stability | cm <sup>3</sup><br>sec | 30<br>5                            | GOST 28084 n 4.6    |
| Hydrogen ion exponent at 20°C                                     | pH                     | 9.4                                | GOST 22567.5        |
| Color   |                        | Red                                | Visual              |

**STORAGE AND HANDLING GUIDELINES**

- Avoid exposing products to direct sunlight.
- Cans, packed in cardboard boxes, must be stored in dry places. Avoid exposing products to moisture.
- It is highly recommended to store drums indoors on pallets and racks.
- If stored outdoors drums should be placed sidewise to avoid accumulation of moisture.
- Shelf life is 5 years. Agitate product before dilution with water.

**ATTENTION:**

**TOTACHI SUPER LONG LIFE ANTIFREEZE Red is poisonous and extremely hazardous if ingested.**

**When changing coolant dispose off used product in accordance with local, regional or federal legislative provisions.**

**TOTACHI INDUSTRIAL CO. LTD. disclaims any liability in case the product is used with violation of these instructions and warnings or it is not used for its intended purpose. Before using product other than intended, consult your local TOTACHI® distributor.**

**HEALTH, SAFETY AND ENVIRONMENT PROTECTION**

Information on health, safety and environment protection is described in the product Safety Data Sheet (SDS). The SDS file contains details on potential hazards, precautions and first aid measures, as well as information on environmental impact and disposal of used products