

# COOLANT Red -40C and -50C G12+

## **PRODUCT DESCRIPTION**

TOTACHI NIRO COOLANT Red G12+ is designed for use in cooling systems of gasoline and diesel internal combustion engines of light motor vehicles and tractors.

The basic components of coolant are ethylene glycol and demineralized water, which provide excellent heat exchanging properties, high boiling temperature and low freezing temperature. The balanced additive package of carboxylate inhibitors provides superior corrosion protection for metals. The product is neutral to rubber products, it prevents foaming and cavitation. TOTACHI NIRO COOLANT Red G12+ is manufactured under ToR 15258135-005-2015 (in accordance with the requirements of ASTM D3306 standard).

The recommended service life is up to 250,000 km for passenger cars or five years (whatever comes first). For off road equipment the recommended service life is up to 450,000 km or 10,000 hours.

## **APPLICATION**

**TOTACHI NIRO COOLANT Red -40C G12+** is ready for use product for cooling systems of mobile equipment with freezing temperature of -40°C. It has a 50/50 water glycol concentration for use in regions with distinctly continental or warm climate. The product is suitable for many modern cars, medium construction and agricultural equipment, which require coolants based on inorganic/carboxylate additive technology and have long service life.

**TOTACHI NIRO COOLANT Red -50C G12+** is ready for use product for cooling systems of passenger cars and commercial vehicles, as well as automotive applications with freezing temperature of -50°C. It has a 60/40 water glycol concentration for use in northern regions with very cold climate, in case freezing does not harm cooling system.

## **CUSTOMER BENEFITS**

- TOTACHI NIRO COOLANT Red G12+ provides effective protection against corrosion of cooling system parts made of aluminum, iron, cast iron, solders and copper alloys.
- TOTACHI NIRO COOLANT Red G12+ has excellent heat exchanging properties (up to 17% more efficient compared to conventional coolants), which increases the reliability of engines in loaded operating conditions.
- TOTACHI NIRO COOLANT Red G12+ maintains effective performance for up to 5 years (in passenger cars); or up to 3 years (for trucks and off-road vehicles).
- TOTACHI NIRO COOLANT Red G12+ has excellent compatibility with sealing materials and rubber hoses used in the cooling systems of most cars.

## **MEETS SPECIFICATIONS AND REQUIREMENTS OF:**

- ASTM D3306 - for maintenance shops;
- GB 29743-2013 (LEC-II)
  - BMW GS 94000
  - CAT 2091/11
  - Cummins IS Series U N14/ CES 14439
  - Chrysler MS-90032
  - DEUTZ DQCCB-14
  - Fiat MAT 3624 / FIAT 9.555323
  - Ford WSS-M97B44-E
  - GM/Opel GMW 3420
  - Jaguar CMR 8229
  - John Deere JDM H5
  - Land-Rover STJLR 651.5003
  - Mazda MEZ MN 121D
  - MB 325.3
  - MWM2091/11
  - Opel-GM 6277M
  - Renault 41-01-001 /-S tape D
  - SUZUKI Santana Motors
  - Vauxhall GME L1301
  - VW/Audi/SEAT/Skoda TL-774-F (G12+)

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

**TYPICAL TEST DATA**

CHARACTERISTICS	UNITS	-40°C	-50°C	METHOD
Appearance		Transparent liquid with no residue	Transparent liquid with no residue	GOST 28084 p.4.1
Density at 20°C	g/cm <sup>3</sup>	1.075	1.080	GOST 18995.1, p.1
Boiling point	°C	110	111	GOST 33594
Chill point, not more than	°C	-40	-50	GOST 28084 p 4.3
Swelling of rubber, not more than	%	5.0	5.0	GOST 9.030-7 p.1
Alkalinity, not less than	cm <sup>3</sup>	6.0	6.0	GOST 28084
Foaming: – Volume of foam after 5 minutes; not more than Foam stability; not more than	cm <sup>3</sup> sec	30 3	30 3	GOST 28084 p 4.6
Hydrogen ion exponent at 20°C	pH	7.5-9.5	7.5-9.5	GOST 22567.5
Color		Red	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.

**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.

**ATTENTION:**

**TOTACHI NIRO COOLANT Red -40C and -50C G12+ are poisonous and extremely dangerous if ingested. In case of swallowing coolant based on aqueous solution of glycol it affects central nervous system, causing dizziness, fainting and vomit.**

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.

