

NIRO™ EURO Coolant

OAT-Technology



PRODUCT DESCRIPTION

NIRO™ EURO Coolant OAT-Technology is coolant / antifreeze, based on water solution of ethylene glycol. The product is specially engineered for the latest generation cooling systems of highly loaded gasoline and diesel engines. It is manufactured using modern OAT-technology (Organic Acid Technology) and contains organic acids (carbon) corrosion inhibitors. The formulation does not contain such inorganic substances as amines, borates, silicates, nitrites and nitrates, which promote increase in service life of water pumps and improve heat exchange from metal surface to coolant.

APPLICATION

The product is recommended for cooling systems of highly loaded gasoline and diesel engines, which require the use of OAT Technology-based coolants. The product supports extended service life up to 5 years / 250, 000 km.

NIRO™ EURO Coolant OAT-Technology is specially recommended for modern engines, where improved protection of aluminum against high temperature corrosion is required.

The product does not contain silicates, phosphates and nitrites; thus, it meets performance requirements of many European OEMs.

CUSTOMER BENEFITS

- The product provides effective protection of engine parts made of aluminum, iron (cast iron), solder and copper alloys against corrosion.
- The product provides more effective heat exchange up to 15%, which improves reliability of engine performance in high loaded operating conditions.
- NIRO™ EURO Coolant OAT-Technology can be safely mixed with other carboxylate based coolants, it has excellent compatibility with modern sealing materials and rubber hoses.

MEETS SPECIFICATIONS AND REQUIREMENTS OF:

- ASTM D3306 для автомобильных сервисов
- ASTM D6210-10 для двигателей Heavy Duty
- SAE J 1034
- Case / New Holland MAT3624
- Cummins CES 14603 / 14439
- DHI KS M2142
- FUSO 325.3
- John Deere JDM H5
- Jenbacher TA 1000-0201
- KOMATSU AF-NAC / 07.892 - 2009
- MAN 324 Type SNF
- Mitsubishi MHI
- Mercedes DBL 7700
- OAO «KAMA3»
- VOLVO 128 6083/002



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

In cooling systems of highly loaded diesel engines it is necessary to use SCA additives, recommended by vehicle OEM.

NIRO™ EURO Coolant OAT-Technology is supplied ready for use. The product does not require additional diluting with water.

For application in regions with mild climate use product with chill point of -40°C. For northern regions with severe cold climate use product with chill point of -50°C.

TYPICAL TEST DATA

CHARACTERISTICS	UNITS	-40°C	-50°C	METHOD
Appearance		Transparent liquid with no residue	Transparent liquid with no residue	P 5.2 ToR
Density at 20°C	g/cm ³	1.076	1.084	GOST 18995.1, section1
Swelling of rubber	%	2.1	2.1	GOST 9.030-7 p.1
Boiling point	°C	111	112	ASTM D1120
Chill point	°C	-40	-50	GOST 28084 p 4.4
Foaming: Volume of foam after 5 minutes; Foam stability	cm ³	5 1	5 1	GOST 28084 p 4.6
Hydrogen ion exponent at 20°C	pH	8.5	8.7	GOST 22567.5
Color		Yellow	Yellow	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:

NIRO™ EURO Coolant OAT-Technology *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.