

# TOTACHI® PREMIUM NRO ISO 22, 32, 46, 68



## PRODUCT DESCRIPTION

High quality hydraulic oils, designed to provide high level of protection for vane, piston and gear pumps of hydraulic systems and deliver long service life under high pressure. The additives package contains zinc based anti wear components that provide resistance to extremely high pressure and also effective corrosion and oxidation inhibitors, as well as antifoaming agents. TOTACHI PREMIUM NRO oils are made using highly refined mineral base oils with excellent hydrolytic stability and fast water separation.

## APPLICATION

- TOTACHI PREMIUM NRO oils are recommended for use in modern high pressure hydraulic systems, which require antiwear oils for effective protection against deterioration with oxidation and rust inhibitors.
- TOTACHI PREMIUM NRO oils are engineered to provide reliable work of precision hydraulic equipment, even in conditions of possible water ingress.

## CUSTOMER BENEFITS

- **Versatility of application** – in general performance data the products fully meet, and in separate characteristics even exceed requirements of major hydraulic equipment OEMs.
- **Excellent protection** of hydraulic systems in which axial piston, gear, vane and other types of pumps

are used, which require antiwear additives for operations under high pressure.

- **Extended drain intervals** – when establishing maintenance according to the advanced standards maximum oil drain intervals in equipment are possible.
- **Maximized uptime of the equipment** - mineral base stocks provide good hydrolytic stability, water separation and also excellent filterability of oil even at water ingress.

## MEETS SPECIFICATIONS AND REQUIREMENTS OF:

- DIN 51524, Part 2 (HLP);
- ANSI/AGMA 9005-E02-RO;
- AIST 126 (US Steel); AIST 127 (US Steel);
- Bosch Rexroth 90220;
- Eaton I-286-S3 (Industrial equipment);
- Eaton-Vickers 35VQ25;
- GENERAL MOTORS LS 2/LH;
- JCMAS P041 HK Hydraulic Specification;
- Parker Hannifin (Denison) HF-0/HF-1/HF-2;
- Parker Hannifin (Denison) T6H20C;
- GENERAL MOTORS LS 2;
- Cincinnati Machine P-68 (ISO 32), P-70 (ISO 46);
- Joy HO-S (ISO 68).

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	VALUES	VALUES	VALUES	VALUES
ISO Grade		VG 22	VG 32	VG 46	VG 68
Kinematic viscosity (ASTM D445) at:	40 °C	21,85	32,09	46,02	69,78
	100 °C	4,302	5,500	6.890	8.914
Viscosity index, ASTM D2270		102	107	105	100
Density at 30°C, ASTM D1298	Kg/l	0,850	0,850	0,859	0,872
Flash point, ASTM D92	°C	210	218	224	242
Pour point, ASTM D97	°C	- 36	- 36	-33	-30
Color, ASTM D1500		L 0,5	L 0,5	L 0,5	L 0,5

**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.

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.