

# FAIRCOL SA100

## HIGH-PERFORMANCE SYNTHETIC OIL FOR RECIPROCATING AIR COMPRESSORS

FAIRCOL SA100 is all entirely new type of synthetic oil for today's high-efficiency reciprocating air compressors. Designed especially for improved safety and greater ease of use, this oil delivers the outstanding performance that you demand.

FAIRCOL SA100's carbonless performance saves energy and cuts costs, greatly reducing total maintenance expenses.

### ● A TRULY EASY-MAINTENANCE OIL

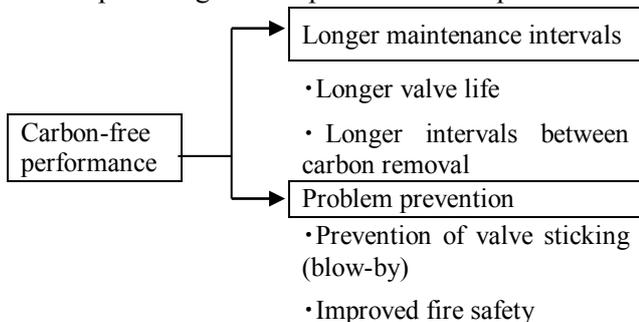
The Nippon Oil Corporation introduced the Faircol A Series of oils for reciprocating air compressors in 1968. In the years since, these oils have been very popular because of their strong resistance to carbon formation. Now, building on this long experience, Nippon Oil has introduced a compressor oil that provides even better total performance: FAIRCOL SA100.

To meet the needs for reduced maintenance, FAIRCOL SA100 is made from a carefully selected synthetic base oil that provides outstanding thermal and oxidation stability. This entirely new type of compressor oil has been specially created to deliver carbon-free performance.

FAIRCOL SA100 features more than just longer oxidation life, excellent foaming prevention, and superb antirust performance. This lubricant has also been specially designed with low combustibility and low odor characteristics that make it both easy to use and easy on compressors.

### ● APPLICATIONS

- Reciprocating-air compressors that require lower



energy consumption.

- Reciprocating air compressors that require improved safety. Examples: compressors located on ships, heavily used factory compressors, etc.

### ● CONTAINERS

- 200-liter drums,
- 20-liter pail cans.

#### TYPICAL TEST DATA FOR FAIRCOL SA100

Kinematic viscosity (40°C)	mm <sup>2</sup> /s	90.2
(100°C)	mm <sup>2</sup> /s	9.57
Viscosity index		79
Flash point (COC)	°C	272
Autogenous ignition point	°C	395
Total acid number	mgKOH/g	0.10
Pour point	°C	-40
Foaming (24°C)	ml	0
(93.5°C)	ml	0
(24°C after 93.5°C)	ml	0
Rust Prevention (pure water, 60°C, 24h)		Passed
Demulsibility (54°C)	min.	40-40-0(3)
Rotary bomb oxidation test(150°C) min.		3500
Falex sticking load	kN	Over 3.56

### ● SPECIAL FEATURES OF FAIRCOL SA100

#### 1. Nearly Carbon-Free

Since there's almost no carbon formation with FAIRCOL SA100, valves stay clean; this means longer valve life and maintenance intervals. You can decide for yourself how much longer your maintenance intervals should be in actual use.

##### a. Laboratory test (thin-film oven test)

A thin oil film was formed continuously in a cylinder-like environment for five hours under conditions of high-temperature oxidation (290°C). The weight of the carbon that formed

was measured and compared.

Units: mg

FAIRCOL SA100	Commercial Synthetic Oil	Commercial Mineral Oil
1.5	9.9	8-30

b. Actual equipment test 1 (on-ship compressor manufactured by Teikoku Machine, 45 kW)

c. Actual equipment test 2 (steam-driven compressor)

FAIRCOL SA100 had a maintenance interval a full three times longer than that of the mineral oil.

## 2. Reduced Danger of Fire

FAIRCOL SA100's flash point is 272°C and its ignition point is 400°C. Both points are 10 to 20°C higher than for mineral oil, so this new lubricant provides much better fireprevention safety with modern high-load, high-temperature, high-compression equipment. And since there is very little carbon formation, FAIRCOL SA100 also prevents heataccumulation ignition that can occur with carbon deposited by conventional compressor oils.

## 3. No Oil Smell During Operation

Because of FAIRCOL SA100's out-standing stability, it produces no decomposition byproducts that can cause bad smells. This means that the work environment stays free of unpleasant odors during operation.

## 4. Longer Compressor Life

FAIRCOL SA100 delivers improved lubricity (e.g., Falex sticking load) with cylinder oiling. In addition, its excellent water separation performance means that it responds completely to the needs of autodrain mechanisms as well as helps to prevent water pollution.

## 5. Dependable Extra-Long Oil Life

A comparison with the oxidation life (RBOT) of conventional reciprocating compressor oils shows that FAIRCOL SA100 lasts more than 20 times longer.

Rotary Bomb Oxidation Test		min. at 150°C
FAIRCOL SA100	Commercial Synthetic Oil	Commercial Mineral Oil
3,500	870	80-250

FAIRCOL SA100 also offers great cost advantages when used as a long-drain crankcase oil.



# Handling Precautions

▼ Follow the following precautions when handling this product.

- Read this product's Material Safety Data Sheet before using the product.
- Obey all applicable laws and regulations concerning the handling and disposal of this product, particularly laws and regulations related to fire safety, the treatment and disposal of waste and sewage, the prevention of water and ocean pollution, and workplace safety and hygiene.

Please request the Material Safety Date Sheet where you purchased this product.

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