



fiorentini

we clean the world

**OILS AND LUBRICANTS
RANGE**



COMPANY PROFILE

Since 1978 the Ing. O. Fiorentini SpA is dedicated to the design and production of industrial cleaning machines and is currently one of the Italian and European leaders in this sector.

With over 40 years of experience in the sector, it is formed by a young and dynamic group of resources, always oriented towards the future and constant improvement. Our commitment is to anticipate customer needs in order to offer the best in terms of products and technical-commercial solutions.

Our staff is able to study customized solutions, suitable to face different types of employment, sometimes niche, with professionalism and competence.

The Fiorentini brand is synonymous with quality, compactness and sturdiness; entirely the result of a design and production entirely Made in Italy. The new designs offer cutting-edge solutions, using the latest generation technologies, with a practical, functional and elegant design.

As part of its continuous growth, Ing. O. Fiorentini SpA produces a wide range of complete machinery designed to satisfy every specific need through the production and sale of scrubbers, sweepers, tow tractors up to 50 quintals, road sweepers, as well as a wide range of vacuum cleaners and single disc machines, professional carpet cleaners, motor and professional vacuums for cleaning city centers.

The company sets itself as a point of reference in the sector, offering superior quality machines and equipment capable of exceeding all customer expectations and the characteristics of the competition.

The company is concentrated in three production plants: in Piancaldoli, Castel S. Pietro Terme and Pietramala, with branches for commercial activities in Milan and Rome.



PRODUCT OVERVIEW

Ing. O. Fiorentini SpA, first in the Cleaning Machines sector, with a view to its constant process of product improvement and the After Sales Service process has conceived and developed a partnership with Nils SpA-AG aimed at creating a “Range of Oils and Specialized” lubricants for industrial and road cleaning machines.

Quality is for Ing. O. Fiorentini which for Nils S.p.A.-AG represents in fact a real competitive strategy that is part of the company mission.

Like a human body, each machine is different with the performances, the working regimes and the rhythms to which it is subjected are different.

Oils and lubricants, in particular, can be compared to human blood, capable of providing a lot of information about the health of a body and at the same time an indispensable element for its proper functioning.

The research and development department of Ing. O. Fiorentini S.p.A. has developed over many months a close technical collaboration with the R&D department of Nils S.p.A.-AG in order to focus on the specific needs of cleaning machines and to be able to study and develop customized products based on their specific use. In the laboratories of Nils S.p.A.-AG, through the analysis of the oils withdrawn, by filtration, microscopic observation and ferrographic analysis, the operating conditions of the machinery were monitored in order to predict their wear and at the same time Ing. O. Fiorentini S.p.A. conducted “operational stress tests” in the most disparate operating conditions of its machines.

This is how FIORENTINI long-lasting lubricants were born, designed to give maximum efficiency and guarantee the greatest economic savings thanks to the reduction of machinery maintenance costs, machine downtime and lubricant consumption, to the benefit of customers and also the environment.

The advantages deriving from the use of FIORENTINI oils and lubricants are the reduction of downtime and emergencies, the decrease in the consumption of lubricants and the increase in the useful life of the components and the availability of the machines, with savings on indirect costs.

for



KETTOLUB SPRAY

Synthetic lubricant for chains specifically formulated for FIORENTINI S.p.A

COD MI638 KETTOLUB SPRAY

KETTOLUB SPRAY it is a synthetic spray lubricant, particularly with additives, suitable for use on all types of chains, even at high temperatures. Thanks to its strong ability to penetrate the chain pins and to its excellent lubricating properties, it guarantees an effective anti-wear action. It is a compatible product with O-rings., To lubricate high temperature chains (eg in pasteurization plants, drying ovens, painting ovens, furnaces, textile industries, etc.); is suitable for drive and conveyor chains, eg. chains of forklifts, textile, packaging, construction machinery etc.

Characteristics

- › protection against rust and corrosion from chopped - excellent anti-wear protection, resistance to loads - minimization of the coefficient of friction
- › Extremely adhesive, it does not drip
- › Maximum resistance to washout
- › Compatibility with seals (also OR)
- › Avoid dust deposits
- › Minimal sludge formation keeping the chain clean - stability over a wide range of temperatures
- › Minimal evaporation losses at high temperatures rature

How to use

Spray KETTOLUB SPRAY from a distance of 20-30 cm until a thin and uniform layer is obtained on the chain. Keep the chain constantly oiled.

CLASSIFICATION	DIN 51502	ELP680
TYPE OF OIL		SINTETICO
COLOUR		WHITE
DENSITY A 15°C	SEB 181301	G/CM3 0.920
BASE OIL VISCOSITY 40° C	DIN 51562	MM2/S CA 680
RANGE OF USE		°C -30 / +260



ATOMIC SPRAY

Lubricating grease with PTFE specifically formulated for FIORENTINI S.p.A.

COD MI637 ATOMIC SPRAY

ATOMIC SPRAY is a new generation partially synthetic grease in an intense blue color spray pack, based on special calcium and lithium soaps and solid PTFE additives. It is designed for the lubrication of rolling and plain bearings, even in conditions of high humidity, very high loads and vibrations or shocks. It is suitable for use at normal temperatures up to medium-high.

Characteristics

- › Resistance to oxidation
- › Processing stability
- › Exceptional water resistance
- › Outstanding anti-corrosive properties
- › Protection against rust from oxidation by friction - very high load bearing capacity
- › Extraordinary adhesiveness

CONTINUOUS WORKING TEMPERATURES		C°	-30 / +120
DROP POINT	ISO 2176	C°	CA 150
WORKED PENETRATION	ISO 2137	1/10 MM	265/295
CONSISTENCY NLGI	DIN 51818		2
RESISTANCE TO WATER	DIN 51807 T1		0 - 90
RESISTANCE TO CORROSION	DIN 51802		0
CORRECTION ON COPPER	DIN 51811		1-100
BASE OIL VISCOSITY (40 ° C)	DIN 51562	MM2/S	CA. 800
WELDING LOAD (4 BALL TEST)	DIN 51350 T4	N	4000
DURATION TEST AT 120 ° C	DIN 51821-02A/1500/6000-120		F50 > 100H
CLASSIFICATION	DIN 51502		KPF 2 K-30

MISTRAL 15W40

Super High Performance (S.H.P.D.) Universal Motor Oil
Specifically Formulated for FIORENTINI S.p.A.



COD. MI644 MOTOR OIL MISTRAL FIORENTINI / 1 LT
COD. MI645 MOTOR OIL MISTRAL FIORENTINI / 4 LT

Mistral 15W/50 CG4 is a multigrade multigrade oil of high quality level particularly suitable for "mixed" fleets: recommended for the lubrication of both petrol engines with catalytic converter and diesel and turbodiesel engines subjected to service conditions burdensome.

Mistral 15W / 50 CG4 is formulated with special paraffin bases and with a balanced combination of additives that guarantee high performance in any condition of use of the engine. The careful selection of these components gives the product the following characteristics:

- › High detergent-dispersing properties that allow to avoid the formation of lac-
that, sludge and deposits inside the engine;
- › Very high viscosity index that ensures excellent cold flowability and high viscosity when hot;
- › Anti-corrosion properties that allow effective protection of the internal parts of the engine from the attack of humidity and combustion products;
- › Excellent anti-wear characteristics that guarantee a long life of the moving parts with consequent reduction of maintenance and overhaul of the engine;
- › Good anti-foam properties that prevent the formation of air bubbles, which cause the lubricating film to break.

ACEA A2/B2-B3-B4/E2-E3-E5 MACK EO-M	CLASSIFIcSAE	15W50		
API CG4 / SJ	DENSITY A15°C	DIN 51757	G/ML	0.890
VOLVO VDS	VISCOSITY 100°C	DIN 51562	MM2/S	17.5
MB 228.3 E 229.1 CUMMINS 20071/20072 MAN 3275	VISCOSITY INDEX	ISO 2909		150
VW 501/505 QUALITY ALLISON C4	POUR POINT	ISO 3016	°C	-30

ANTARES 46

"Premium" anti-wear oil specifically formulated for the hydraulic technologies of FIORENTINI S.p.A.



COD. MI642 HYDRAULIC OIL ANTARES 46 FIORENTINI **5 LT**
COD. MI643 HYDRAULIC OIL ANTARES 46 FIORENTINI **10 LT**

ANTARES 46 is a hydraulic fluid developed with FIORENTINI S.p.A. with particular attention, selecting first refining mineral bases having a high natural viscosity index, low pour point, high flash point, combined with pronounced anti-foam, anti-wear and anti-rust properties.

Thanks to the particular bases used, ANTARES 46 is used on all hydraulic systems, even operating in severe conditions such as high pump speeds and high operating temperatures and pressures, guaranteeing in any case maximum efficiency.

- high wear protection with a significant increase in the life of the moving mechanical parts. - excellent antifoam and air release properties for which the oil always maintains its prerogatives of maximum compressibility.
- particularly high viscosity index for a limited viscosity variation in case of large ones temperature fluctuations, low pour point for easy cold starting.
- particular anti-corrosion and anti-rust power towards mechanical parts and high stability against oxidation and alteration in general and therefore long service life.
- excellent separation power of water coming from leaks or condensation.

viscosity15°C	DIN 51757 G/ML	0.860 46
viscosity 40°C	DIN 51562MM2/S	
viscosity100°C	ASTM D445 mm2/s	7.2
Viscosity index	ISO 2909	118
Pourpoint	ISO 3016 °C	- 21
Flash point	ASTM D92 °C	220



fiorentini

w e c l e a n t h e w o r l d

factories

**50033 Piancaldoli (FI) via Piancaldoli 1896 Firenzuola
tel +39 0558173610 - fax +39 055817144**

**50033 Pietramala (FI) via Pietramala 70/B
tel +39 055813447 - fax +39 055813504**

**40024 Castel San Pietro (BO) via Cà Bianca 231/C
tel +39 051941743 - fax +39 0516942400**

commercial branches

**20132 Milano via Palmanova 211/A
tel +39 0227207783 - fax +39 022592779**

**00012 Guidonia Montecelio (Roma) via Bruno Pontecorvo 20
tel +39 0774357184 - fax +39 0774353419**

corporate data

Ing. O. Fiorentini S.p.A via Piancaldoli, 1896 - Firenzuola

50033 Fraz. Piancaldoli (FI) - Italia

P.I. 06113160482 Certificazione ISO 9001:2015

e-Mail: info@ingfiorentini.it

DUNS N° 339086095