



Advanced Lubricants, Oils and Fuel Additives

# AGRICULTURAL & OFF-HIGHWAY

BUILT ON HISTORY PERFECTED THROUGH TIME





# NATURE AGAINST THE MACHINE

**FOR EQUIPMENT EMPLOYED IN THE AGRICULTURE, FORESTRY AND OFF-HIGHWAY SECTORS, WORKING CONDITIONS ARE AMONG THE MOST EXTREME. MACHINERY IS EXPECTED TO COPE WITH THE HEAVIEST WORKLOADS IN ALL WEATHERS, DAY IN, DAY OUT. AND THE PRESSURE'S ALWAYS ON TO AVOID COSTLY EQUIPMENT FAILURE AND DOWNTIME.**

At Millers Oils, we understand the demands these environments make on machinery.

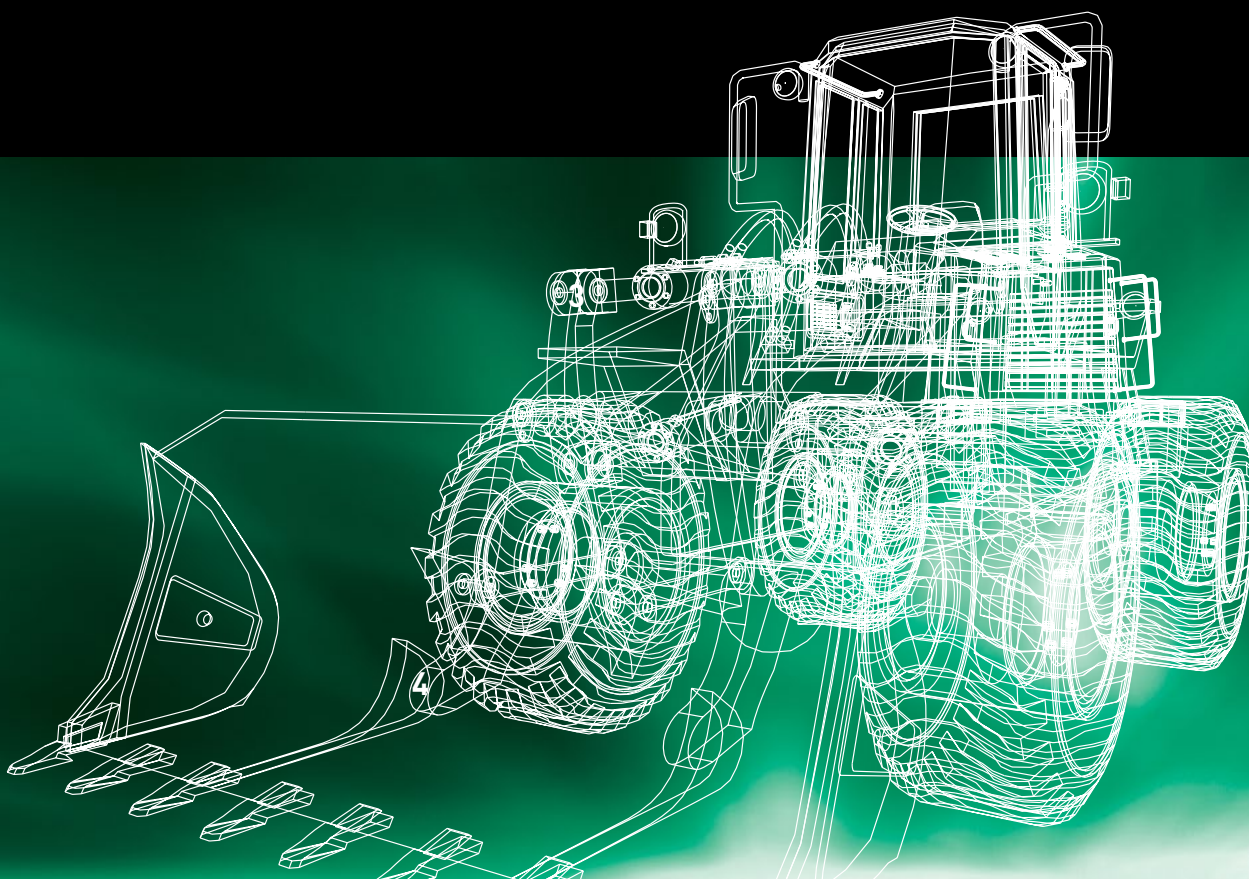
We've responded with a range of high performance lubricants and maintenance products designed to keep equipment running reliably and efficiently in all conditions.

We have history. Since the first tractors appeared, Millers Oils has maintained a strong reputation as a manufacturer and supplier of high quality lubricants to the agriculture and off-highway sectors.

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#### DEVELOPMENT

Constant evolution of new formulations in our Research & Development lab.

#### BLENDING

Blended and produced right here for you.

#### DELIVERY

Delivered to you with care via our own fleet of trucks.

#### PROTECTION

Future proof economical protection.

## TECHNICAL SUPPORT

All our products are backed up by fast, accessible technical support. Our technical service team is always on hand to provide information and expert advice as and when it's needed.

Many of the technical details and specifications relating to our products and their use with particular equipment are held in our own extensive database, so the answers you need may be available already.

#### We can offer the following support:

- Advice on the correct use of our products.
- Lubrication problem solving.
- Material safety datasheets (MSDS) and health & safety support.
- Sample analysis of lubricants.
- Used oil analysis and oil recommendations.
- Clear guidance over technical and product specification issues.

TECHNICAL HELP DESK  
**Tel: +44 (0) 1484 475060**



# GEAR, TRANSMISSION & UNIVERSAL OILS

## MILLFARM XTOU 10w30 / 15w40

### SUPER UNIVERSAL TRACTOR OIL

XTOU Tractor Oils Universal have been developed to meet increased performance demands while retaining the traditional benefits of a multifunctional lubricant for engines, gearboxes, final drives, hydraulics and oil immersed wet brakes. Available in 10w30 and 15w40 viscosities 205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

##### Engine:

API CG-4, SF | ACEA E3

MB 227.1 | MAN 271

##### Gear/Transmission:

API GL4 | Allison C4 | CAT TO-2

ZF TE ML 06A, B, C, 07B

##### STOU:

Massey Ferguson M1139, M1144,

M1145 | Ford M2C 159B/C

New Holland NH 030C, NH 024C

FNH 82009201/2/3

John Deere J27A



## MILLITRAN 10w30

### UNIVERSAL TRACTOR TRANSMISSION OIL

Developed as a UTTO. Recommended for all tractor and off-highway equipment which requires a combined hydraulic, transmission and final drive fluid with wet brake and power take-off performance. 205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

Case New Holland MAT 3525 & 3526

Massey Ferguson CMSM1135, M1141,

M1143, M1145 | Ford M2C134D

M2C86-B, C

J.I Case/Case International

MS-1204, 1206, 1207, 1209

John Deere: JDM J20C, J20D

Kubota UDT | Caterpillar TO-2

Volvo WB101 (VCE 97303) excluding

motor grader ZF rear axles | Allison C4

API GL4 | ZF TE-ML 06F, 06H

## MILLITRAN 10w40

### UNIVERSAL TRACTOR TRANSMISSION OIL

A 10w40 UTTO as required by certain tractor and off-highway equipment as a combined hydraulic, transmission and final drive fluid with wet brake and power take-off performance. 205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

Case New Holland MAT 3525 & 3526

Massey Ferguson CMSM1135, M1141,

M1143, M1145 | Ford M2C134D,

M2C86-B, C | J.I Case/Case International

MS-1204, 1206, 1207, 1209

John Deere: JDM J20C, J20D | Kubota

UDT | Caterpillar TO-2 | Volvo WB101

(VCE 97303) excluding motor grader

ZF rear axles | Allison C4 | API GL4

ZF TE-ML 06F, 06H

## MILLITRAN HY 20

### FULLY SYNTHETIC UNIVERSAL TRACTOR TRANSMISSION OIL SAE 20

A UTTO product with specific viscosity requirements for certain tractors and off-highway equipment.

205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

Case New Holland MAT 3525 & 3526

Massey Ferguson CMSM1135, M1141,

M1143, M1145 | Ford M2C134D,

M2C86-B, C | J.I Case/Case International

MS-1204, 1206, 1207, 1209

John Deere: JDM J20C, J20D

Kubota UDT | Caterpillar TO-2

Volvo WB101 (VCE 97303) excluding motor

grader ZF rear axles | Allison C4 | API GL4

## MILLITRAN 4 SAE 10, 30, 50

### TRANSMISSION, WET BRAKES, HYDRAULICS AND FINAL DRIVES

The Millitran 4 range has been developed specifically for off-highway equipment that requires Caterpillar TO-4 specification oil for use in transmissions, hydraulics, torque converters, final drives and wet brake applications. 205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

API GL4 | CAT TO-4, Caterpillar TO-

4M, Caterpillar TO-2 | Allison C4 |

Komatsu KES 07.868.1

## MILLITRAN FD-1 SAE 60

### HEAVY DUTY FINAL DRIVE AND AXLE OIL FOR USE IN OFF HIGHWAY EQUIPMENT

Developed to meet the requirements of Caterpillar FD-1 specification. 205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

Caterpillar FD-1 SAE 60



## EP 80w 90 GL4

### GEAR OIL

An API GL4 gear oil for use in vehicle gearboxes and transaxles, industrial power transmission systems and axles not requiring hypoid oils. 205L | 25L | 4X5L (case)

**PERFORMANCE PROFILE**  
API GL4 | MIL-L-2105

## HYPOID 80w90, 85w140 GL5

### GEAR OILS

GL5 gear oils for hypoid rear axles, differentials and certain heavy duty gearboxes and transmissions. 205L | 25L | 4X5L (case)

**PERFORMANCE PROFILE**  
API GL5 | MAN 342M-2  
ZF TE-ML 05A, 7A, 12E, 16B, C, D, 17B, 19B | MIL-L-2105D

## LIMITED SLIP 90

### DIFFERENTIAL OIL

For use in limited slip differentials and front drive axles. Provides smooth power transmission and reduces noise. 205L | 25L | 4X5L (case)

**PERFORMANCE PROFILE**  
API GL5

## MILLERMATIC TYPE G

### AUTOMATIC TRANSMISSION FLUID

For use in pre-1981 Ford automatic gearboxes and other gearboxes requiring a non-friction modified ATF. 205L | 25L | 4X5L (case)

**PERFORMANCE PROFILE**  
Ford ESP-M2C33G

## MILLERMATIC ATF UN

### AUTOMATIC TRANSMISSION FLUID

For use in all applications where a Dexron IID is specified, including automatic transmissions, power steering, torque converters, hydraulic systems, transfer boxes and power take-off applications. 205L | 25L | 4X5L (case)

**PERFORMANCE PROFILE**  
GM Dexron IID | Ford Mercon M2C138CJ, M2C185A, M2C166H Allison C4 | CAT T0-2 | MB 236.7 MAN 339 Type Z1, Type V2 Voith V55, 6335 ZF-TE-ML-02F, 04D, 09B, 11A, 11B, 14A, 17C

## MILLERMATIC ATF DM

### AUTOMATIC TRANSMISSION FLUID

A synthetic based ATF for use where a Dexron IIIH is specified, including automatic transmissions, power steering, torque converters, hydraulic systems, transfer boxes and power take-off applications. 205L | 25L | 4X5L (case)

**PERFORMANCE PROFILE**  
GM Dexron IIIH | Ford Mercon MB 236.10 | Allison C4, V730 & TES 389 | CAT T0-2 | MAN 339 Type F, Z1, V1, Z2, V2 | Voith V55, 6336 Volvo 97340, 97341 | ZF-TE-ML-02F, 04D, 03D, 09B, 11A, 11B, 14A, 14B, 17C 6HP 26 (ATF M1375.4)

## MILLERMATIC ATF DM EXTRA

### AUTOMATIC TRANSMISSION FLUID

A synthetic based ATF for use in automatic transmissions and equipment requiring the following performance profile. 205L | 25L | 4X5L (case)

**PERFORMANCE PROFILE**  
Allison C4 | Allison TES-295 suitable after warranty period MB 236.9 | MAN 339 Type V2, Z2 Voith V55, 6336, XX (G1363) GM Dexron IIIH | ZF-TE-ML 14A,14B,14C

# BRAKE & CLUTCH FLUIDS

## UNIVERSAL BRAKE FLUID DOT 4

### NON-MINERAL BRAKE AND CLUTCH FLUID

A high boiling point universal brake and clutch fluid. 25L | 4X5L (case) | 10X1L (case)

**PERFORMANCE PROFILE**  
SAE J1703 | F.M.V.S.S 116 DOT 4

## LHM FLUID

### HIGH PERFORMANCE MINERAL BRAKE AND CLUTCH FLUID

A mineral-based product required for some hydraulic brakes. Not to be mixed with other non-mineral brake fluids. 10X1L (case)

**PERFORMANCE PROFILE**  
Meets PSA B71 2710 | Ford ESN M6C 59A ISO 7308

# ENGINE OILS

## MILLFARM XHPD 15w40

### HIGH PERFORMANCE MINERAL ENGINE OIL

Recommended for use in tractors, agricultural equipment, off-highway and fleet operations. Suitable for use in Euro III and most Euro IV and Euro V emission controlled engines. Extended drain periods of up to 500 hours.  
205L | 25L

#### PERFORMANCE PROFILE

ACEA E7 | API CI-4, SL  
MAN M3275 | MB 228.3  
Cummins CES 20071, 2, 6, 7  
Mack EO-N, EO-M Plus  
Volvo VDS-3  
Renault RLD/RLD2  
CAT ECF-1a, ECF-2 | MTU Type 2

## TRUCKMASTER FE 10w30

### SEMI SYNTHETIC ENGINE OIL

Provides class leading performance in heavy duty, long drain diesel engine oils. The combination of latest Technology, group II base oils, viscosity improvers and mid SAPS performance additives has produced an oil with outstanding capability.  
205L | 25L

#### PERFORMANCE PROFILE

ACEA E9, E7, API CJ-4, SN  
MAN M3575 | MB 228.31  
Volvo VDS-4 | Mack EO-O  
Premium Plus  
Cummins CES 20071, 2, 6, 7, 8, 81  
Detroit Diesel 93K218  
CAT ECF-3, ECF-2, ECF-1-a  
Renault RLD-3 | MTU Category 2.1  
Deutz DQC III-10LA

## TRUCKSYNTH LE 10w40

### FULLY SYNTHETIC LOW SAPS ENGINE OIL

High performance fully synthetic low SAPS engine oil suitable for the latest Euro IV, V and VI emission controlled engines requiring ACEA E6, E9 specification lubricants. Extended drain periods of up to 750 hours.  
205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

ACEA E6, E7, E9 | API CI-4 / SL  
MAN M3477, M3271-1 | MB 228.5, 228.51  
Mack EO-N, EO-M Plus  
Renault RXD RLD-2, RGD  
MTU Type 3.1 | Volvo VDS 3, CNG  
CAT ECF-1-a | Deutz DQC IV-10 LA  
Scania LA | JASO DH-2

## TRUCKMASTER XPFE 10w40

### SYNTHETIC HIGH PERFORMANCE ENGINE OIL

Formulated to meet and exceed the requirements of Mercedes Benz 228.5 specification. Provides enhanced lubrication for other diesel engines requiring this level of performance. Benefits include easy starting, low oxidation, high temperature tolerance, high film strength.  
205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

ACEA E4, E7 | API CF | MB 228.5  
MAN M3277 | Scania LDF-2, LDF-3  
Renault RXD/RLD2  
Volvo VDS-3 | MTU Type 3  
Cummins CES 20072

## TRUCKSYNTH EE 5w30

### FULLY SYNTHETIC LOW SAPS ENGINE OIL

Providing "one engine oil" for most modern fleets. Offering maximum fuel efficiency, extended drain intervals and protection for engine and emission systems fitted to the latest generation of emission controlled diesel engines. Compatible with SCR and DPF systems.  
205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

ACEA E6, E9, E7, API CJ-4 / SN  
MAN M3477, M3271-1  
MB 228.51, 228.31  
Mack EO-O Premium Plus  
EO-N Premium Plus, EO-M Plus  
Renault RXD, RLD-3, RLD-2, RGD  
MTU Type 3.1 | Volvo VDS 4, VDS 3, CNG  
CAT ECF-3 | Deutz DQC IV-10 LA  
Cummins CES 20081 | JASO DH-2

## TRUCKMASTER LD 10w40

### SEMI SYNTHETIC ENGINE OIL

Providing excellent protection for a range of European and US technology diesel engines operating under arduous conditions. LD ensures high levels of mechanical reliability, engine longevity, extended drain periods, low oil top-up with optimal fuel economy.  
205L | 25L

#### PERFORMANCE PROFILE

ACEA E7, A3/B4, API CI-4, SL  
MAN M3275 | MB 228.3  
Volvo VDS-3 | Mack EO-N  
EO-M Plus | Cummins CES 20071, 2, 6, 7, 8 | DHD-1  
Renault RLD/RLD2  
CAT ECF-1a | ECF-2 | MTU Type 2  
Deutz DQC III-10  
Detroit Diesel DDC 93K215

## TRUCKMASTER CJ-4 15w40

### MID SAPS ENGINE OIL

Class leading performance in heavy duty long drain diesel engine oils. Utilising a combination of Group II base oils, VI improvers and the latest technology additives. Extended drain periods of up to 500 hours.  
205L | 25L

#### PERFORMANCE PROFILE

ACEA E9 | API CJ-4, SN  
MAN 3575 MB 228.31 | Volvo VDS-4 | Mack EO-O Premium Plus | Cummins 20071, 72, 76, 77, 78, 81 | CAT ECF-3, ECF-2, ECF-1-a | Renault RLD-3  
MTU Category 2.1 | Deutz DQC III-10 LA

## MAXIFLEET DD 40

### MONOGRADE ENGINE OIL

Suitable for stationary gas engines and off-highway vehicles, particularly Detroit Diesel two stroke engines.  
205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

API CF-2, CF, SG | MB 228.0  
MAN M270 | TBN mg KOH/gm 7.1





# ENGINE OILS

## MILLGAS 40

### MONOGRADE ENGINE OIL

For the lubrication of natural gas powered engines according to the OEM requirements.

Note: Selection of the correct gas engine oil is critical with regard to the quality of gas in use and the OEM requirements and specifications. Consult Technical with regard to your selection.

205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

API CC | MIL-L-2104B  
TBN mg KOH/gm 8.1

## LAWN MOWER OIL 30

### MONOGRADE ENGINE OIL

Suitable for use in all 4-stroke lawnmower engines, air and water cooled.

25L | 4X5L (case) | 10x1L (case)

#### PERFORMANCE PROFILE

API SE, CC

## MILLGAS BIO-GEN

### MONOGRADE ENGINE OIL

A high TBN gas engine oil for use in biogas digester engines.

205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

API CF | Meets the requirements of: Caterpillar, Jenbacher, Waukesha  
TBN mg KOH/gm 20

## DALBY 2 STROKE OIL

### MONOGRADE ENGINE OIL

Low ash formulation suitable for all air cooled two-stroke engines. Can be used in outboard engines not requiring an ashless oil. Dyed blue for ease of recognition.

205L | 25L | 4X5L (case) | 10x1L (case)

#### PERFORMANCE PROFILE

JASO FB | ISO EGC

## SUPERFLEET SD 10w30, 30

### MULTIGRADE ENGINE OIL

Use for crankcase lubrication of "classic vehicles", pre 1979 naturally aspirated diesel and petrol engines.

205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

API CC/SE | CCMC D1/G1 | MIL-L-2104B,  
MIL-L-46152A | DEF STAN 91-43/1  
Gardner Engines Sheet 729H

## SUPER TWO STROKE

### ASHLESS ENGINE OIL

A two-stroke oil for use where ashless performance additives are required to minimise pre-ignition and lower emissions.

205L | 25L | 4X5L (case) | 10x1L (case)

#### PERFORMANCE PROFILE

Meets the requirements of the National Marine Manufacturers Association(NMMA) TC-W3

# HYDRAULIC OILS

## MILLMAX 22, 32, 37, 46, 68

### MINERAL HYDRAULIC OILS

High quality mineral oils with additive treatment to provide excellent anti-wear, antifoam, oxidation stability and corrosion protection. Provides a good response in hydraulic and fluid power systems.

205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

DIN 51524 Part 2 | Denison HF-0, HF-2  
Vickers-HP Vane Pump  
Cincinnati Milacron P38, P54, P55,  
P57, P68, 70  
AFNOR Filtration (Wet NFE 48-691)

## MILLMAX 22 ZF, 32 ZF, 46 ZF, 68 ZF

### ZINC FREE MINERAL HYDRAULIC OILS

High quality mineral oils with zinc-free additive treatment to provide excellent anti-wear, antifoam, oxidation stability and corrosion protection. Provides a good response in hydraulic and fluid power systems.

205L | 25L

#### PERFORMANCE PROFILE

DIN 51524 Part 2 | SEB 181-222  
AFNOR E48-603 HM

## MILLMAX 22 HV, 32 HV, 37 HV, 46 HV, 68 HV

### HIGH VISCOSITY INDEX MINERAL HYDRAULIC OILS

High quality, high viscosity index, mineral oils offering multigrade properties in extreme temperatures. Provides excellent anti-wear, antifoam, oxidation stability and corrosion protection. Millmax 46HV is a popular selection in hydrostatic applications.

205L | 25L

#### PERFORMANCE PROFILE

DIN 51524 Part 2 and 3 | Denison  
HF-0, HF-1, HF-2  
Vickers M-2950-S, 1-286-S  
Cincinnati Milacron P68, P69, P70 |  
US Steel 127, 136 | ASTM 943, Pass

## P392 HYDRAULIC OIL BLUE

### HIGH VISCOSITY INDEX MINERAL HYDRAULIC OIL

High viscosity index ISO 46 mineral oil to meet the specifications of Poclair hydraulic fluid.

205L | 25L

#### PERFORMANCE PROFILE

DIN 51524 Part 2 and 3 | Poclair

## MAXIFLEET 10, 20

### MONOGRADE OIL SUITABLE FOR HYDRAULIC SYSTEMS

For use in hydraulic systems where engine oil additive type oils are required by the manufacturer

205L | 25L | 4X5L (case)

#### PERFORMANCE PROFILE

API CF-2, CF, SG | MB 228.0 |  
MAN M270





## BIODEGRADABLE HYDRAULIC **OILS**

### **MILLMAX BIO 15, 32** HEES TYPE SYNTHETIC BIODEGRADABLE HYDRAULIC OILS

Biodegradable esters utilising ash-less anti-wear additives for use in hydraulic applications where a biodegradable HEES (Hydraulic Environmental Ester Technology) type fluid is required. High viscosity index multigrade performance and low pour point provide excellent performance across a wide temperature range.  
205L | 25L

**PERFORMANCE PROFILE**  
DIN 51524 Part 2 and 3 | Exceeds  
OECD (Organization for Economic  
Co-operation and Development)  
201, 202, 203, 301B

### **MILLMAX 46 HFD(u), 68 HFD(u)** SYNTHETIC BIODEGRADABLE AND FIRE RESISTANT HYDRAULIC OILS

Biodegradable esters utilising ash-less anti-wear additives for use in hydraulic applications where a fire-resistant, biodegradable HFD(u) type fluid is required. High viscosity index multigrade performance and low pour point provide excellent performance across a wide temperature range. Recommended for working environments where a high degree of fire resistance is required.  
205L | 25L

**PERFORMANCE PROFILE**  
DIN 51524 Part 2 and 3 | Sperry  
Vickers 1-286-S  
AFNOR NFE 48603 | BSEN ISO  
12922:2002  
Exceeds OECD (Organization for  
Economic Co-operation and  
Development) 201, 202, 203, 301B

# GREASES AND COMPOUNDS

## LITHIUM GREASES

### DELTAPLEX 2EP RED COMPLEX GREASE

Outstanding performance in all types of bearings under a wide range of operating conditions.  
50kg | 12.5kg | 3kg | 36x400g cartridge (case)

#### PERFORMANCE PROFILE

NLGI No.2 | Operating range -20 to + 150 °C

### DELTA 2EP MULTIPURPOSE GREASE

Good all-round grease for the lubrication of ball and roller bearings, and general use.  
50kg | 12.5kg | 3kg | 36x400g cartridge (case)

#### PERFORMANCE PROFILE

NLGI No.2 | Operating range -20 to + 140 °C

### DELTA 0EP, 00EP, 000EP SEMI FLUID AUTOLUBE GREASE

Pumpable grease for automatic lubrication systems. Self-collapsing properties make it suitable for use in enclosed gear boxes.  
50kg | 12.5kg | 3kg

#### PERFORMANCE PROFILE

NLGI No.00 | Operating range -30 to + 110 °C

### MILLERGREASE WG2 SPECIALISED GREASE WITH CALCIUM

A multipurpose grease for all types of bearings subjected to high loads, and where water wash-out may be a problem.  
50kg | 12.5kg | 36x400g cartridge (case)

#### PERFORMANCE PROFILE

NLGI No.2 | Operating range -20 to + 140 °C



### BLACK MOLY MM2, MPQ 2 MULTIPURPOSE GREASE WITH MOLYBDENUM DISULPHIDE

An excellent general purpose grease with the inclusion of molybdenum disulphide solid lubricant to provide added performance.  
50kg | 12.5kg | 36x400g cartridge (case)

#### PERFORMANCE PROFILE

NLGI No.2 | Operating range -20 to + 140 °C

### PBL PIN & BUSH LUBRICANT

A tenacious grease for heavy duty applications where adhesion, shock loading and good corrosion protection are required. Ideal for use on bucket pins and bushes on heavy earth-moving equipment and crane slews, and 5th-wheel applications on articulated vehicles. Not recommended for anti-friction, rolling element bearings.  
50kg | 12.5kg | 36x400g cartridge (case)

#### PERFORMANCE PROFILE

NLGI No.2 | Operating range -20 to + 140 °C

## CALCIUM SULPHONATE GREASE

### MILLERGREASE LLWR2 SPECIALISED GREASE

A grease developed for lubricating bearings and components operating under severe conditions: high temperatures, high load, salt water ingress and certain levels of chemical attack.  
50kg | 12.5kg | 36x400g cartridge (case)

#### PERFORMANCE PROFILE

NLGI No.2 | Operating range -30 to + 150 °C



## BENTONE GREASES

### CA HAMMER GREASE

SPECIALISED GREASE WITH COPPER, GRAPHITE AND ALUMINIUM SOLIDS

A soft adhesive water resistant grease. Ideal for use on contact breaker hammers, hydraulic and air operated hammers, chisels and peckers.

12.5kg | 36x400g cartridge (case)

#### PERFORMANCE PROFILE

NLGI No.2 | Operating range -20 to + 1000 °C (under certain conditions)

## ANTI-SEIZE AND ASSEMBLY COMPOUNDS

### MILLERGREASE NS COPPER

ANTI-SEIZE COMPOUND

A combination of high-performance solids and polymers providing a non-melting assembly compound.

12.5kg | 3kg | 6x500g (case)

#### PERFORMANCE PROFILE

NLGI No.1.5 | Operating range -20 to + 1100 °C

### RED RUBBER GREASE

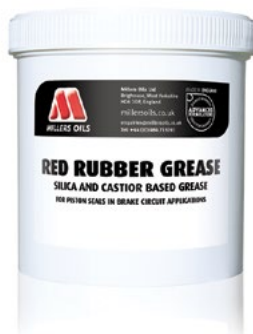
VEGETABLE OIL-BASED

A vegetable oil-based product suitable for the lubrication of rubber and components which come into contact with rubber.

6x500g (case)

#### PERFORMANCE PROFILE

NLGI No.2



## COMPRESSOR OILS

### MILLAIR 32, 46, 68, 100, 150

MINERAL COMPRESSOR OILS

High quality mineral oils with a multi-functional high performance additive system. For the lubrication of reciprocating, rotary compressors and vacuum pumps according to the equipment manufacturers' requirements and specifications.

205L | 25L | 4X5L (case) | 10xL (case)

#### PERFORMANCE PROFILE

DIN 51506 VD-L

### MILLERVANE 2000

MINERAL COMPRESSOR OIL

High quality mineral oil with a specially developed additive system for vane compressors. Allows for the extended drain intervals required by some vane compressors. Also suitable for use in some reciprocating compressors.

205L | 4X5L (case)

#### PERFORMANCE PROFILE

2000 hour operation | Red in colour

### MILLAIR 46 SYNTH

SYNTHETIC COMPRESSOR OIL

Synthetic base oils with multi-functional additive system. For the lubrication of reciprocating and rotary compressors requiring extended drain periods of up to 4000 hours.

205L | 25L

#### PERFORMANCE PROFILE

4000 hour operation

DIN 51506 VD-L

ISO/DP 6521 (DAG)



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# CHAINSAW OILS

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## CHAINSAW OIL

ISO 100 (SAE 30), ISO 150 (SAE 40), ISO 220 (SAE 50)  
MINERAL OIL

Premium grade mineral oils with the inclusion of a tacky adhesive additive, anti-wear and corrosion resistance for the lubrication of the chain, guide bars, linkages and rivets.

205L | 25L | 4X5L (case)

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# ANTIFREEZE COOLANTS

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## ALPINE ANTIFREEZE BT

ALSO AVAILABLE DILUTED AND READY FOR USE

A high quality corrosion-inhibited ethylene glycol antifreeze and coolant to provide engine cooling systems with frost and anti-corrosion protection.

Blue in colour.

205L | 25L | 4X5L (case)

### PERFORMANCE PROFILE

BS6580-1992

Protection from freezing down to -46°C

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## ALPINE ANTIFREEZE EXTEND

ALSO AVAILABLE DILUTED AND READY FOR USE

An ethylene glycol based automotive antifreeze and coolant utilising Organic Acid Technology (OAT). For use in all diesel and petrol engines to protect from frost and prevent corrosion.

Red in colour.

205L | 25L | 4X5L (case)

### PERFORMANCE PROFILE

Meets most European and International standards for a long life antifreeze. Protection down to -37°C.

Extra long life-up to 150,000 miles or 5 years whichever occurs first.

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## ALPINE ANTIFREEZE PG

A propylene glycol based antifreeze, offering low toxicity for use in environmentally sensitive areas. Excellent anti-corrosion protection.

Blue in colour.

205L | 25L | 4X5L (case)

### PERFORMANCE PROFILE

BS6580 | Protection down to -32°C



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# SUNDRY PRODUCTS

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## MILKING MACHINE OIL

MINERAL OIL

A mineral oil for the lubrication of vacuum pumps in all types of milking machines.

205L | 25L | 4X5L (case)

### PERFORMANCE PROFILE

DIN 51524 part 2

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## SHIRE OIL

HIGHLY REFINED WHITE OIL

For use as a dressing for shire horse feathers.

205L | 25L | 4X5L (case) | 10xL (case)

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## PIG OIL

A LIGHT VISCOSITY PALE OIL

For application to pigs' backs to prevent dryness of the skin and to improve the quality of the coat.

205L | 25L





MILLERS OILS





# ECLIPSE™ FUEL TREATMENTS



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**AT MILLERS OILS WE'RE ALREADY DEVELOPING NEW SOLUTIONS DESIGNED TO REDUCE COSTS, PROTECT ENGINES AND GAIN MAXIMUM PERFORMANCE FROM THE NEXT GENERATION OF DIESEL FUELS. THIS IS ECLIPSE, OUR ADVANCED RANGE OF FUEL TREATMENTS.**

Environmental legislation changes continually. The EU Directive 2009/30/EC set new standards for red diesel used in non-road mobile machinery, and came into effect 1st January 2011. Sulphur levels in fuel have been cut by 99% to prevent damage to the emission control systems on new Stage IIIb engines. While the lower cetane value of gas oil reduces the combustibility of the fuel, the reduction in sulphur has a direct effect on the fuel's ability to lubricate injector pumps. The amount of biodiesel that may now be blended into the fuel is 7% (B7), an increase from 5% (B5).

The introduction of biodiesel fuel will unquestionably reduce negative effects on the environment, but there's also strong evidence that it impacts directly on engine performance and durability.

- Biodiesel is prone to both fuel dilution and fuel concentration in the oil sump.
- With biodiesel, oil viscosities may change and lubricants can quickly go out of grade.
- Oil viscosities can also increase due to oxidation.
- Increased levels of piston deposits can occur.
- Increased likelihood of sludge formation.
- Biodiesel is prone to creating bacterial and fungal contamination in the fuel tank and system.

All these factors can lead to performance problems, higher maintenance and repair costs and even reduced engine life when using biodiesel.





# BIODIESEL PROS AND CONS

## BENEFITS:

- REDUCED BLACK SMOKE
- REDUCED PARTICULATE MATTER
- CO<sub>2</sub> NEUTRAL

## POTENTIAL PROBLEMS:

- INCREASED NOX
- REDUCED POWER
- REDUCED FUEL ECONOMY
- FUEL INSTABILITY
- INCREASED FUEL DILUTION
- FUEL/LUBRICANT INTERACTION CAUSING OIL OXIDATION, PISTON DEPOSITS AND SLUDGE
- BACTERIAL AND FUNGAL GROWTH IN THE FUEL TANK

Biodiesel makes fuel and fuel systems vulnerable to biological contamination which can clog up and eventually block fuel systems.



The image to the right shows the biological contamination of a fuel filter after using biodiesel.

## ECLIPSE™

### INCREASES FUEL EFFICIENCY, LOWERS EMISSIONS & CLEANS INJECTORS

Eclipse™ is a revolutionary new fuel additive that not only increases fuel efficiency but also lowers emissions and cleans injectors. For cost effective performance with all types of diesel engines, especially Euro IV and Euro V emission compliant vehicles. Also compatible with Euro III and older vehicles and mobile plant.

205L | 25L | 4X5L (case) | 10xL (case)

#### APPLICATION:

Add to the bulk fuel tank or individual vehicle tanks in the ratio one part to 1000 parts of fuel [1ml/Litre].

## ECLIPSE™ POWERCIDE PLUS

### PREVENTS FUEL BACTERIAL CONTAMINATION, INCREASES FUEL EFFICIENCY, LOWERS EMISSIONS & CLEANS INJECTORS

A specialist diesel fuel treatment, which combines an effective treatment for the prevention of bacterial and fungal contamination with improved cetane and detergent additives for increased fuel efficiency, lower emissions and cleaner injectors. To eradicate bacterial and fungal contamination first use Eclipse™ Shock Dose then follow up with Eclipse™ Powercide Plus for continued protection against contamination.

25L | 4X5L (case) | 10xL (case) | 10x500mls (case)

#### APPLICATION:

Add to the bulk fuel tank or individual vehicle tanks in the ratio one part to 1000 parts fuel [1ml/Litre]

## ECLIPSE™ SHOCK DOSE

### HELPS ERADICATE BACTERIAL AND FUNGAL CONTAMINATION OF FUEL & FUEL SYSTEMS

A highly effective diesel fuel treatment, which helps to eradicate problems caused by bacterial and fungal contamination. For use where contamination of the fuel and fuel system has already occurred or is suspected.

25L | 4X5L (case) | 10xL (case) | 10x500mls (case)

#### APPLICATION:

Add to fuel in the ratio one part to 1000 parts fuel [1 ml/Litre]. Following this treatment Eclipse Powercide Plus should be added to the fuel to offer continued protection against contamination.

## ZEROFLO TWO

### WINTER FUEL ADDITIVE

Zeroflo Two is an additive for diesel fuel to improve cold flow characteristics and depress the formation of wax crystals which can appear at low temperatures. Fuel varies in response to wax crystal modifiers on a fuel to fuel basis. Winter diesel and gas oil should flow down to -15°C. The addition of Zeroflo Two at the recommended treatment should improve this by a further -5°C down to -20°C. To be used at one part per 1000 parts of diesel fuel.

205L | 25L



Advanced Lubricants, Oils and Fuel Additives

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FIND YOUR NEAREST MILLERS OILS STOCKIST  
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All products and information are reflective of the latest specifications at the time of going to print. The company reserves the right to change formulations and specifications without prior notice.

AGRI / JAN 2015 / Issue 2 / 75552

