

Technical Data Sheet

PNEUMATIC PLUS MINERAL BASED PNEUMATIC OIL



Product Description

PNEUMATIC PLUS is specially formulated for use in hydraulic systems employing high performance pumps. They are specially filtered to minimize particle contamination to meet NAS 4 cleanliness levels of NAS 1638, which ensures trouble free function of servo valves. These products possess excellent oxidation, demulsibility characteristics & high FZG rating. The products are further fortified with rust & foam inhibitors.

Applications

PNEUMATIC PLUS oils have good filterability & are formulated to meet Cincinnati Milacron P-69, DIN 51524 Part 2, Dennison HF-0, Dennison HF-2 specifications. Excellent film strength & anti-wear properties to minimize wear in pumps, rings, valves, pistons, cylinders etc. High demulsibility. Anti-foam properties ensure efficient Functioning. High Viscosity index to ensure excellent viscosity characteristics under operating conditions.

PNEUMATIC PLUS oils are recommended for use in hydraulic systems, high performance electro-hydraulic or numerically controlled systems, pumps & circulation oiling systems & enclosed gear boxes.

Benefits

- NAS VALUE 4, Super Clean type Hydraulic oil.
- Good Anti-Form property.
- High demulsibility property.
- High Viscosity Index.
- Excellent Anti-Wear property.

Performance Standard

- DIN 51524 Part 2 HLP
- ISO 6743/4 HM
- Dennison HF-0, HF2 US Steel 127
- Cincinnati Milacron P-69 IS: 11656 1986
- IS: 10522 1998



Typical Properties

| PROPERTIES | TEST METHOD | 32 | 46 | 68 |
|---|----------------|------|------|------|
| ISO Viscosity Grade | | 32 | 46 | 68 |
| cSt @ 40 ⁰ C | | 30 | 46 | 68 |
| Viscosity Index (min) | ASTM D 2270 | 100 | 100 | 100 |
| Rust Test D665, A&B, 24 hrs. | | Pass | Pass | Pass |
| FZG Test, Pass Stages | | 10 | 10 | 10 |
| Flash Point, ⁰ C, (min) | ASTM D 92 | 210 | 210 | 210 |
| Emulsion Test, D-1401, 40-37-3, minutes, max. | | 20 | 20 | 20 |
| NAS Cleanliness Level, per 100 ml | | 4 | 4 | 4 |

Available Packs: 20, 50 and 210 Litres.

Shelf Life: 36 Months from manufacturing month.

* All related specifications are meets or exceeds.

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly. The Material Safety Data Sheet (MSDS) are available upon request through our sales office.



Product Supplier

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

PNEUMATICPLUS PETRELPLUS INC. One World Center, Tower One, 9th Floor, Senapati Bapat Marg, Lower Parel, Mumbai-400013, Maharashtra. Call # +91 22 6216 7072 (Monday to Friday) Cell # +91 93522 25457 marketing@petrelplus.com www.petrelplus.com

2. COMPOSITION

A composition of Base Oil and proprietary Additives.

3. HAZARDS INDENTIFICATION

| -Flammable at high temperature. |
|--|
| |
| -May cause mild irritation to the eyes upon direct contact. |
| -Prolonged contact may defat the skin or can cause dermatitis. |
| -hazards. |
| -Harmful if swallowed. |
| |

4. FIRST-AID MEASURES

| Inhalation | -Remove person to fresh air. Seek medical help if discomfort persists. |
|--------------|---|
| Ingestion | -Do not induce vomiting. Seek medical support. |
| Skin Contact | -Immediately flush skin with plenty of water for at least 15 minutes. |
| Eye Contact | -Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. |

5. FIRE-FIGHTING METHODS

Extinguishing media -Use dry chemical powder or carbon di – oxide or foam. Special protective equipment -Positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURE

Personal protection-Adequate ventilation, gloves, goggles, overalls and boots.Environmental precautions-Avoid entry into water courses.Clean up method-Absorb on inert material.

7. STORAGE AND HANDLING

Handling-Impervious gloves & eye protection ensure good ventilation. Keep away from source of ignition.Storage-Store in a cool & dry place.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

| Respiratory protection | -Not required under normal conditions. |
|------------------------|--|
| Skin/hand protection | -Impervious gloves, overalls, and boots. |
| Eye protection | -Use Goggles |

9. TYPICAL PROPERTIES

| -32/46 and 68 |
|---------------|
| - Pass |
| -210 |
| - 4 |
| |





10. STABILITY AND REACTIVITY

| Stability | -Stable |
|----------------------------------|--------------------------------|
| Conditions to avoid | -Excessive temperatures |
| Materials to avoid | -Strong oxidizers |
| Hazardous decomposition products | -Oxides of carbon and nitrogen |

11. TOXICOLOGICAL INFORMATION

Skin contact-Possible irritationEye contact-Possible irritationInhalation-Not applicableIngestion-Irritation. May cause lung damage.Long term effect-Not known

12. ECOLOGICAL INFORMATION

| Mobility | - Mobile |
|-----------------------------|-------------------|
| Degradation | - Low |
| Accumulation | -Not expected |
| Short- and Long-Term effect | - Water pollutant |

13. DISPOSAL CONSIDERATIONS

Dispose off according to local and National Regulations.

14. TRANSPORT INFOMRATION

| CPL | - Not applicable |
|-----|------------------|
| IMO | -Not applicable |

IMO -Not applicable

15. REGULATORY INFORMATION

| Symbol(s) | -Not applicable |
|-----------|------------------|
| Phrase(s) | - Not applicable |
| Phrase(s) | - Not applicable |

16. OTHER INFORMATION: PRODUCT SAFETY

For safety reasons, it is IMPERATIVE that customer: -Ensure that all those within their control who use the products are supplied with all relevant information contained within the Material Safety Data Sheet and Technical Bulletin concerning the applications for which the product is designed and any instructions or warning.