

TELLUS S 46 HYDRAULIC OIL MSDS Academic PDF

tellus s 46 hydraulic oil msds

Understanding the Material Safety Data Sheet (MSDS) for Tellus S 46 Hydraulic Oil is crucial for ensuring safe handling, storage, and disposal of this industrial lubricant. As a high-quality hydraulic oil produced by reputable manufacturers such as Shell, Tellus S 46 is widely used in various hydraulic systems across industries including manufacturing, construction, and transportation. The MSDS provides detailed information on the properties, hazards, safety precautions, and emergency measures related to this product. This article offers an in-depth analysis of the MSDS for Tellus S 46 Hydraulic Oil, guiding users in maintaining safety standards and compliance with regulatory requirements.

What is Tellus S 46 Hydraulic Oil?

Product Overview

Tellus S 46 is a high-performance, anti-wear hydraulic oil formulated to provide excellent lubrication, wear protection, and oxidation stability. It is designed for use in hydraulic systems operating under a wide range of temperatures and conditions, offering reliable performance and long service life.

Key Properties

- Viscosity Grade: 46 cSt at 40°C
- Base Oil Type: Mineral oil
- Additive Package: Anti-wear, anti-corrosion, oxidation inhibitors
- Applications: Hydraulic systems, industrial machinery, mobile equipment

Understanding the MSDS for Tellus S 46 Hydraulic Oil

Purpose and Importance of the MSDS

The Material Safety Data Sheet (MSDS) is a comprehensive document that provides essential safety information about a chemical product. It is mandated by occupational health and safety regulations to inform users of potential hazards, safe handling practices, and emergency procedures.

Components of the MSDS

- Identification of the substance
- Composition and ingredients
- Hazard identification
- First-aid measures
- Fire-fighting measures
- Accidental release measures
- Handling and storage guidelines
- Exposure controls and personal protection
- Physical and chemical properties
- Stability and reactivity
- Toxicological information
- Ecological information
- Disposal considerations
- Transport regulations
- Regulatory information

Hazard Identification and Classification

Physical Hazards

Tellus S 46 Hydraulic Oil is classified as a flammable liquid due to its petroleum base. It can ignite if exposed to heat, sparks, or flames.

Health Hazards

- Skin contact may cause irritation or dermatitis.
- Inhalation of vapors or aerosols can lead to respiratory irritation.
- Eye contact may result in irritation or redness.
- Ingestion is unlikely but may cause gastrointestinal discomfort.

Environmental Hazards

Spills or leaks can contaminate water sources and soil, posing risks to aquatic life and ecosystems.

Handling and Storage Instructions

Safe Handling Practices

- Use personal protective equipment (PPE) such as gloves, goggles, and protective clothing.
- Avoid inhaling vapors; ensure adequate ventilation.
- Prevent skin and eye contact by utilizing appropriate barriers.
- Do not smoke or ignite open flames near the product.

Storage Guidelines

- Store in a cool, dry, well-ventilated area away from heat sources.
- Keep containers tightly closed when not in use.
- Store away from incompatible materials such as oxidizing agents.
- Use corrosion-resistant containers and secondary containment to prevent leaks.

Exposure Controls and Personal Protective Equipment (PPE)

Engineering Controls

- Implement local exhaust ventilation systems in areas where vapors may accumulate.
- Use enclosed systems where possible to minimize exposure.

Personal Protective Equipment

- Gloves: Nitrile or neoprene gloves resistant to petroleum.
- Eye Protection: Safety goggles or face shields.
- Respiratory Protection: Use appropriate masks or respirators if ventilation is inadequate.
- Clothing: Long sleeves and protective clothing to prevent skin contact.

First-Aid Measures

In Case of Skin Contact

- Remove contaminated clothing.
- Wash affected area with soap and water.
- Seek medical attention if irritation persists.

In Case of Eye Contact

- Rinse immediately with plenty of water for at least 15 minutes.
- Remove contact lenses if present.
- Seek medical advice if irritation continues.

Inhalation

- Move to fresh air immediately.
- If breathing is difficult, administer oxygen and seek medical attention.

Ingestion

- Do not induce vomiting.
- Rinse mouth with water.
- Seek medical aid immediately.

Fire-Fighting Measures

Suitable Extinguishing Media

- Foam, dry chemical, carbon dioxide, or water spray.

Specific Hazards

- Combustible liquid; vapors may ignite.
- Decomposition products may include carbon monoxide and other toxic gases.

Firefighting Precautions

- Use protective gear including breathing apparatus.
- Eliminate ignition sources.
- Cool containers with water spray to prevent rupture.

Accidental Release Measures

Containment and Cleanup

- Use absorbent materials such as sand, earth, or commercial spill kits.
- Prevent entry into waterways or drains.
- Collect and store in suitable containers for disposal.

Environmental Precautions

- Notify environmental authorities if spills contaminate water bodies.
- Implement immediate containment to minimize ecological impact.

Disposal Considerations

Waste Management

- Do not dispose of in regular trash or drains.
- Follow local, regional, and national regulations for disposal.
- Incinerate in approved facilities or treat as hazardous waste.

Recycling and Reuse

- Used oil can sometimes be reclaimed or recycled; consult licensed waste disposal companies.

Regulatory Information

Applicable Regulations

- Comply with OSHA, EPA, and local environmental agencies.
- Ensure proper labeling and documentation.
- Maintain safety data sheets accessible to all personnel.

Transport Regulations

- Classified under hazardous materials; follow DOT or IMDG codes for shipping.
- Use proper containers and labeling during transport.

Physical and Chemical Properties from the MSDS

- **Appearance:** Clear, pale yellow liquid
- **Odor:** Mild petroleum smell
- **Boiling Point:** Approximately 300°C (572°F)
- **Flash Point:** Around 150°C (302°F)
- **Vapor Pressure:** Low at ambient temperatures
- **Specific Gravity:** About 0.88-0.89 at 15°C
- **Viscosity:** 46 cSt at 40°C
- **Solubility:** Insoluble in water; soluble in hydrocarbons

Stability and Reactivity

Chemical Stability

- Stable under normal conditions.
- No significant decomposition at room temperature.

Reactivity

- Reacts with strong oxidizers.
- Avoid contact with incompatible materials such as acids or strong bases.

Conditions to Avoid

- Heat, open flames, sparks.
- Incompatible substances.

Toxicological Information

Potential Health Effects

- Skin irritation or dermatitis from prolonged contact.
- Respiratory irritation from vapors.
- Eye irritation.

Acute Toxicity

- Generally low; ingestion or inhalation at high concentrations may cause health issues.

Chronic Effects

- Long-term exposure may lead to dermatitis or respiratory problems; proper PPE reduces risks.

Environmental Considerations

Ecotoxicity

- Harmful to aquatic organisms; spills should be contained and cleaned promptly.

Persistence and Degradability

- Mineral oils are relatively persistent but can be degraded by certain microbial processes.

Conclusion

Having comprehensive knowledge of the MSDS for Tellus S 46 Hydraulic Oil is essential for anyone involved in its handling and management. This document ensures that safety protocols are followed, hazards are minimized, and emergency responses are effective. Proper storage, handling, and disposal in accordance with MSDS guidelines not only protect workers and the environment but also ensure compliance with regulatory standards. Always keep the MSDS accessible in workplaces where Tellus S 46 is used, and ensure personnel are trained on its contents and safety measures. Maintaining vigilance and adherence to safety practices promotes a safe working environment and prolongs the service life of hydraulic systems utilizing Tellus S 46 Hydraulic Oil.

Tellus S 46 Hydraulic Oil MSDS: An In-Depth Analysis of Safety Data and Usage Considerations

Hydraulic systems are the backbone of countless industrial and construction operations, relying heavily on high-performance lubricants to ensure efficiency, safety, and longevity. Among these lubricants, Tellus S 46 hydraulic oil stands out as a widely used mineral-based hydraulic fluid renowned for its excellent lubrication properties and stability. Central to understanding its safe handling and application is the Material Safety Data Sheet (MSDS), which provides comprehensive information about the product's chemical composition, hazards, handling procedures, and safety measures. This article offers an in-depth review of the MSDS for Tellus S 46 hydraulic oil, unpacking its critical components, safety considerations, and implications for users in various industries.

Understanding the Significance of the MSDS for Tellus S 46 Hydraulic Oil

What Is an MSDS and Why Is It Important?

A Material Safety Data Sheet (MSDS), now often referred to as Safety Data Sheet (SDS), is a document that details the chemical properties, hazards, safe handling practices, and emergency measures related to a chemical product. For industrial lubricants like Tellus S 46, the MSDS is vital for several reasons:

- **Ensuring Worker Safety:** It provides essential information to prevent accidents, exposures, and health issues.
- **Regulatory Compliance:** Proper documentation helps companies adhere to OSHA, EPA, and other regulatory standards.
- **Environmental Protection:** Guidelines on spill response and disposal mitigate environmental impact.
- **Operational Efficiency:** Clear handling instructions prevent product degradation and equipment damage.

Understanding the MSDS for Tellus S 46 empowers users to manage risks effectively, ensuring safe storage, transportation, and application.

Chemical Composition and Characteristics of Tellus S 46

Basic Composition

Tellus S 46 hydraulic oil is primarily a mineral-based oil formulated with specific additives to enhance its performance. Its core components include:

- **Base Oils:** Mineral hydrocarbons derived from refining crude oil, offering lubricity and viscosity stability.
- **Additives:** Anti-wear agents, antioxidants, viscosity index improvers, rust inhibitors, and demulsifiers.

The typical viscosity grade of 46 indicates a certain thickness level suitable for a wide range of hydraulic applications, balancing flowability and film strength.

Physical and Chemical Properties

According to the MSDS, key physical and chemical parameters include:

- Appearance: Clear, pale yellow liquid.
- Odor: Slight petroleum odor.
- Boiling point: Generally above 300°C, indicating high thermal stability.
- Flash point: Typically around 200°C, influencing fire hazard considerations.
- Specific Gravity: Approximately 0.88 - 0.89 at 15°C.
- pH: Not applicable, as it is a neutral mineral oil.
- Vapor Pressure: Very low, reducing inhalation risks under normal conditions.
- Solubility: Immiscible with water but soluble with most mineral oils and hydrocarbons.

These properties make Tellus S 46 suitable for hydraulic systems operating under moderate to high temperatures while maintaining safety margins.

Hazard Identification and Potential Risks

Health Hazards

While generally considered low in toxicity, exposure to Tellus S 46 can pose health risks:

- Inhalation: Breathing in mists or vapors may cause respiratory irritation.
- Skin Contact: Prolonged or repeated contact can lead to skin irritation or dermatitis.
- Eye Contact: Contact may cause mild to moderate irritation.
- Ingestion: Accidental swallowing can lead to gastrointestinal discomfort; not a typical route of exposure but still a concern.

The MSDS highlights that the oil is non-toxic in small quantities but emphasizes avoiding inhalation of aerosols or vapors.

Environmental Hazards

The product is classified as hazardous to aquatic life due to its petroleum-based composition. Spills can cause environmental contamination, requiring prompt response measures.

Fire and Explosion Risks

Despite its relatively high flash point, Tellus S 46 is combustible. The MSDS indicates:

- Flammability: Can ignite if exposed to open flames, hot surfaces, or sparks.
- Firefighting Measures: Use of foam, dry chemical, or carbon dioxide; water spray may be ineffective but can cool containers.
- Explosion Risk: Low, but vapors can accumulate in confined spaces.

Handling and Storage Guidelines

Safe Handling Practices

Operational safety depends on adherence to recommended handling procedures:

- Personal Protective Equipment (PPE): Use gloves, safety goggles, and respiratory protection if aerosolized.
- Ventilation: Ensure adequate ventilation to prevent vapor accumulation.
- Avoiding Spills: Use containment measures like drip trays and secondary containers.
- Hygiene: Wash hands thoroughly after handling; avoid ingestion or skin contact.

Storage Recommendations

Proper storage is critical to maintain product integrity and safety:

- Storage Conditions: Store in a cool, dry, well-ventilated area away from heat sources and open flames.
- Container Compatibility: Use approved, sealed containers resistant to petroleum products.
- Segregation: Keep away from incompatible materials such as strong oxidizers or acids.
- Labeling: Clearly mark storage containers with product and hazard information.

Emergency Measures and First Aid

In Case of Skin Contact

- Remove contaminated clothing.
- Wash skin thoroughly with soap and water.
- Seek medical attention if irritation persists.

In Case of Eye Contact

- Rinse immediately with plenty of water for at least 15 minutes.
- Seek medical care if irritation continues.

Inhalation Incidents

- Move the individual to fresh air.
- If breathing is difficult, administer oxygen if trained.
- Seek medical attention.

Ingestion

- Do not induce vomiting.
- Rinse mouth with water.
- Seek medical attention immediately.

Environmental Spill and Disposal Procedures

Spill Response

- Contain the spill using absorbent materials.
- Prevent runoff into water bodies.
- Use appropriate personal protective equipment.
- Collect and dispose of waste per local regulations.

Disposal Guidelines

- Do not pour onto the ground or into water sources.
- Dispose of in accordance with hazardous waste regulations.
- Recycle or reclaim if possible, via licensed disposal services.

Regulatory and Safety Compliance

Regulations Applicable to Tellus S 46

- OSHA: Requires proper labeling, handling, and training.
- EPA: Waste disposal and spill response must adhere to environmental laws.

- REACH and Globally Harmonized System (GHS): Classification and labeling standards.

Labels and Symbols

The MSDS indicates the use of hazard pictograms such as:

- Flammable liquid
- Environmental hazard
- Health hazard (irritant)

Proper labeling ensures awareness and compliance.

Conclusion: Navigating Safety with Tellus S 46 MSDS

The MSDS for Tellus S 46 hydraulic oil provides essential insights into its chemical makeup, hazards, and safe handling protocols. While the product is generally safe when used properly, understanding its flammability, environmental impact, and health risks allows operators and safety managers to implement effective safety measures. Proper storage, handling, and disposal, guided by the detailed recommendations in the MSDS, are vital to prevent accidents and ensure compliance with regulatory standards. Ultimately, comprehensive knowledge of the MSDS safeguards workers, protects the environment, and optimizes the performance and longevity of hydraulic systems utilizing Tellus S 46.

By thoroughly understanding and respecting the safety data, industries can maximize the benefits of this high-quality hydraulic oil while minimizing associated risks.

Question What are the primary safety hazards associated with Tellus S 46 Hydraulic Oil as per its MSDS? The MSDS indicates that Tellus S 46 Hydraulic Oil may pose health hazards such as skin and eye irritation, respiratory irritation if inhaled, and potential for flammability. Proper handling and protective measures are recommended to minimize risks. What are the recommended first aid measures in case of accidental contact with Tellus S 46 Hydraulic Oil? In case of skin contact, wash thoroughly with soap and water. For eye contact, rinse immediately with plenty of water and seek medical attention. If inhaled, move the person to fresh air and seek medical help if symptoms persist. If ingested, do not induce vomiting and consult medical personnel. How should Tellus S 46 Hydraulic Oil be stored according to its MSDS? It should be stored in a cool, well-ventilated area away from heat sources, open flames, and incompatible materials. Containers should be tightly closed when not in use and stored upright to prevent leaks. What are the environmental precautions associated with Tellus S 46 Hydraulic Oil as per the MSDS? The MSDS highlights that spills can contaminate water sources and soil. It advises containment and cleanup measures to prevent environmental release and recommends using absorbent materials for spill

control. Is Tellus S 46 Hydraulic Oil considered flammable, and what fire-fighting measures are recommended? Yes, it is flammable. Firefighters should use foam, dry chemical, or carbon dioxide to extinguish fires. Protective gear and breathing apparatus should be worn, and spills should be cooled with water spray to prevent ignition. What personal protective equipment (PPE) is recommended when handling Tellus S 46 Hydraulic Oil? Use appropriate PPE such as gloves, safety goggles, and protective clothing to minimize skin and eye contact. In areas with poor ventilation, respiratory protection may also be necessary. Does the MSDS for Tellus S 46 Hydraulic Oil provide information about its stability and reactivity? Yes, the MSDS states that the oil is stable under normal conditions. It should be kept away from strong oxidizers, heat, and open flames to prevent reactive hazards. Are there any disposal considerations or guidelines for Tellus S 46 Hydraulic Oil outlined in the MSDS? Disposal should conform to local, state, and federal regulations. The MSDS recommends collecting and disposing of used oil and contaminated materials in approved waste management facilities to prevent environmental contamination.

Related keywords: hydraulic oil, Tellus S 46, MSDS, mineral oil, hydraulic fluid, lubrication oil, industrial oil, fluid safety data, hydraulic lubricant, oil specifications

SHELL TELLUS C22

Introduction to Shell Tellus C22: The Premium Hydraulic Oil Solution

shell tellus c22 is a leading hydraulic oil formulation designed to meet the demanding needs of modern industrial machinery. As industries evolve, the importance of reliable, high-performance lubricants becomes paramount to ensure equipment longevity, efficiency, and safety. Shell Tellus C22 stands out as a top-tier hydraulic oil that combines advanced additive technology with high-quality base oils, providing optimal performance across a variety of applications. Whether in manufacturing plants, construction equipment, or mobile machinery, Shell Tellus C22 offers a comprehensive solution to enhance operational productivity and reduce maintenance costs.

In this comprehensive guide, we will delve into the key features, benefits, applications, and technical specifications of Shell Tellus C22, helping you make an informed decision for your hydraulic system needs.

Understanding Hydraulic Oils and Their Importance

What Are Hydraulic Oils?

Hydraulic oils are specialized lubricants used in hydraulic systems to transfer power efficiently,

lubricate moving parts, and prevent corrosion and wear. They are vital in ensuring the smooth operation of machinery such as excavators, presses, injection molding machines, and other industrial equipment.

Why Quality Matters in Hydraulic Oils

Using high-quality hydraulic oils like Shell Tellus C22 ensures:

- Reduced equipment wear and tear
- Improved system efficiency
- Lower maintenance costs
- Enhanced safety and reliability
- Extended machinery lifespan

Choosing the right hydraulic oil is crucial to prevent issues such as foaming, oxidation, and deposit formation, which can impair system performance.

Features and Benefits of Shell Tellus C22

Key Features

- **High-Performance Additive Technology:** Shell Tellus C22 contains advanced additives that provide excellent wear protection and oxidation stability.
- **Premium Base Oils:** Made from carefully selected base oils to ensure low volatility and high thermal stability.
- **Anti-Wear and Anti-Corrosion Properties:** Protects hydraulic components from premature wear and corrosion.
- **Excellent Demulsibility:** Ensures rapid separation of water from the oil, reducing the risk of emulsions.
- **Good Compatibility:** Compatible with many sealing materials and other lubricants, minimizing system contamination.

Major Benefits

- **Enhanced Equipment Durability:** Provides robust protection for hydraulic components, extending service intervals.
- **Superior Hydraulic Performance:** Maintains optimal viscosity for efficient power transfer.
- **Reduced Operating Costs:** Less downtime and lower maintenance expenses due to improved

reliability.

- Environmental Compatibility: Meets industry standards for environmental safety and sustainability.
- Versatility: Suitable for a wide range of hydraulic systems operating under various temperature and load conditions.

Technical Specifications of Shell Tellus C22

Parameter	Specification
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Viscosity Grade	ISO 32 and ISO 46 (depending on application)
Viscosity Index	Typically above 100
Flash Point	Generally above 200°C
Pour Point	Typically below -15°C
Oxidation Stability	Excellent, ensuring long oil life
Anti-Wear Performance	Meets or exceeds industry standards such as DIN 51524 Part 2
Compatibility	Compatible with most sealing materials and other hydraulic oils

Note: Always refer to the product datasheet for detailed specifications tailored to your specific application.

Applications of Shell Tellus C22

Shell Tellus C22 is designed to deliver optimal performance in various industrial and mobile hydraulic systems. Its versatility makes it suitable for:

Industrial Hydraulic Systems

- Manufacturing machinery
- Injection molding equipment
- Presses and stamping machines
- Machine tools

Mobile Hydraulic Equipment

- Construction machinery (excavators, loaders)
- Agricultural machinery
- Material handling equipment
- Mining equipment

Specialized Uses

- Hydraulic systems requiring long oil life
- Equipment operating under high load and temperature conditions
- Systems demanding high wear protection

Why Choose Shell Tellus C22 Over Other Hydraulic Oils?

Superior Performance and Reliability

Shell Tellus C22 is formulated with proprietary additives that outperform many conventional hydraulic oils, ensuring your equipment runs smoothly and efficiently.

Proven Track Record

With decades of experience in lubricant formulation, Shell offers products backed by extensive research, testing, and real-world performance data.

Environmental and Safety Standards

Shell is committed to sustainability, and Tellus C22 complies with industry standards for environmental safety, making it a responsible choice for modern facilities.

Cost-Effectiveness

The durability and efficiency benefits of Shell Tellus C22 translate into reduced maintenance costs and minimized downtime, providing excellent value over the product's lifespan.

How to Properly Use and Maintain Shell Tellus C22

Application Guidelines

- Ensure the hydraulic system is clean before filling.
- Use the recommended viscosity grade (ISO 32 or ISO 46) based on your equipment specifications.
- Follow the manufacturer's instructions for oil change intervals.
- Regularly monitor oil condition and viscosity to detect early signs of contamination or degradation.

Storage Recommendations

- Store in a clean, dry, and cool environment.
- Keep containers tightly sealed when not in use.
- Avoid exposure to direct sunlight and extreme temperatures to preserve oil quality.

Environmental and Safety Considerations

Shell Tellus C22 is formulated to meet stringent safety and environmental standards. Proper handling and disposal are essential to minimize environmental impact. Always follow local regulations and best practices for lubricant disposal.

Conclusion: Making the Most of Shell Tellus C22

Choosing the right hydraulic oil is vital for maintaining the efficiency, safety, and longevity of your machinery. Shell Tellus C22 stands out as an industry-leading solution, offering exceptional performance, reliability, and value. Its advanced formulation ensures optimal protection against wear, oxidation, and corrosion, making it suitable for a wide range of industrial and mobile hydraulic applications.

Investing in Shell Tellus C22 can lead to significant operational benefits, including extended equipment life, reduced downtime, and lower maintenance costs. For businesses seeking a dependable, high-quality hydraulic oil, Shell Tellus C22 is an excellent choice that aligns with industry standards and environmental considerations.

Where to Purchase Shell Tellus C22

Shell products are widely available through authorized distributors, industrial supply stores, and online platforms. When purchasing Shell Tellus C22, ensure you buy from reputable sources to guarantee product authenticity and quality.

Final Thoughts

In summary, Shell Tellus C22 is a premium hydraulic oil designed to meet the rigorous demands of modern machinery. Its blend of high-quality base oils and advanced additives provides unparalleled protection and performance, making it a smart investment for any industrial operation aiming for efficiency and durability.

For more information or to request a quote, contact your local Shell representative or visit the official Shell website. Proper selection and maintenance of hydraulic oils like Shell Tellus C22 will ensure your equipment operates smoothly, safely, and efficiently for years to come.

Shell Tellus C22: An In-Depth Review of a Premier Hydraulic Oil Solution

In the realm of industrial machinery and hydraulic systems, the choice of lubricants plays a pivotal role in ensuring operational efficiency, longevity, and safety. Among the myriad options available, Shell Tellus C22 stands out as a premium hydraulic oil designed to meet the demanding needs of modern machinery. This comprehensive review delves into the composition, features, applications, and performance characteristics of Shell Tellus C22, offering industry professionals and enthusiasts a detailed understanding of this product.

Understanding Shell Tellus C22

What is Shell Tellus C22?

Shell Tellus C22 is a high-performance, anti-wear hydraulic oil formulated to deliver exceptional lubrication, oxidation stability, and wear protection. It belongs to Shell's renowned Tellus series, which is widely recognized across industries for reliable hydraulic system performance. C22 indicates its viscosity grade, aligning with ISO 32 or ISO 46 standards, depending on regional classifications, making it suitable for a broad spectrum of hydraulic applications.

Key Attributes and Specifications

- Viscosity Grade: ISO VG 32/46, adaptable for various machinery requirements.
- Base Oil Composition: Mineral oil-based, with carefully selected additives.
- Additive Technology: Incorporates anti-wear agents, rust and oxidation inhibitors, and rust inhibitors.
- Performance Standards: Meets or exceeds industry standards such as DIN 51524 Part 2, ISO 11158, and API GL-1.

Composition and Technology

Base Oil Characteristics

Shell Tellus C22 utilizes high-quality mineral oils that provide excellent lubricating properties. These base oils are refined to remove impurities, ensuring consistent viscosity and thermal stability. The mineral oil base offers reliable performance across a range of operational temperatures, though it is primarily designed for moderate to heavy-duty applications.

Advanced Additive Package

The additive technology embedded within Shell Tellus C22 enhances its performance attributes:

- Anti-wear agents: Protect moving parts from premature wear, extending equipment lifespan.
- Oxidation inhibitors: Prevent oil degradation during prolonged operation, reducing sludge and deposit formation.
- Rust and corrosion inhibitors: Safeguard hydraulic components against moisture-induced corrosion.
- Demulsifiers: Facilitate efficient separation of water from oil, minimizing contamination risks.

This combination results in a lubricant that maintains its protective qualities under demanding operational conditions.

Performance Features and Benefits

Enhanced Wear Protection

One of Shell Tellus C22's primary advantages is its ability to form a durable lubricating film on metal surfaces, minimizing metal-to-metal contact. This reduces component wear, especially in high-load systems, and ensures machinery operates smoothly over extended periods.

Oxidation and Thermal Stability

The oil's resistance to oxidation minimizes the formation of sludge, varnish, and acid buildup. Its thermal stability allows it to withstand high operating temperatures without significant breakdown, maintaining viscosity and lubrication efficacy.

Corrosion Resistance and Water Separation

The rust and corrosion inhibitors protect hydraulic components from moisture-induced deterioration. Additionally, efficient demulsification properties facilitate water separation, reducing the risk of hydraulic system failure due to water contamination.

Energy Efficiency and Cost Savings

By reducing wear and maintaining optimal viscosity, Shell Tellus C22 can contribute to lower energy consumption, reducing operational costs over time. Its long service life also diminishes maintenance frequency and expenses.

Applications and Compatibility

Industrial Hydraulic Systems

Shell Tellus C22 is suitable for a wide range of industrial machinery, including:

- Plastic moulding machines
- Construction equipment
- Manufacturing presses
- Material handling systems

Its versatility makes it a preferred choice across sectors like manufacturing, mining, and transportation.

Compatibility with Equipment

This hydraulic oil is compatible with most hydraulic system materials, including seals, hoses, and pumps. However, it is crucial to consult equipment manufacturer guidelines to ensure compatibility, especially with systems that have specific lubricant requirements.

Operational Conditions

While Shell Tellus C22 performs reliably under typical conditions, it is especially advantageous in:

- Moderate to high-temperature environments
- Systems requiring anti-wear protection
- Applications with frequent water exposure

Comparison with Other Hydraulic Oils

Versus Mineral Oils

Compared to standard mineral oils, Shell Tellus C22 offers superior additive technology, resulting in better wear protection, oxidation stability, and water separation. Its formulation extends oil change intervals and reduces maintenance.

Versus Synthetic Alternatives

Synthetic hydraulic oils generally provide better performance in extreme temperatures and longer service life. However, Shell Tellus C22 strikes a balance between cost and performance, making it an economical choice for many applications without compromising essential protective features.

Market Positioning

Shell Tellus C22 is positioned as a premium mineral hydraulic oil, suitable for applications where reliability and protection are paramount but where synthetic oils may not be economically justified.

Operational and Maintenance Considerations

Oil Change Intervals

The oil's stability allows for extended drain intervals, typically ranging from 1,000 to 2,000 hours of operation, depending on system conditions and load.

Monitoring and Testing

Regular analysis of oil condition—checking parameters such as viscosity, particle contamination, and water content—helps optimize maintenance schedules and prevent system failures.

Storage and Handling

Proper storage in sealed containers away from contaminants ensures the oil maintains its quality. Handling precautions include avoiding exposure to moisture and extreme temperatures.

Sustainability and Environmental Impact

Environmental Considerations

Shell Tellus C22, like other mineral oils, poses environmental risks if spilled or improperly disposed of. However, Shell emphasizes responsible handling, and the product's formulation aims to minimize environmental impact during its lifecycle.

Recycling and Disposal

Disposal of used oil must adhere to local regulations. Recycling options are available, and Shell provides guidance to ensure environmentally responsible practices.

Conclusion: Is Shell Tellus C22 the Right Choice?

Shell Tellus C22 embodies a blend of technological innovation, reliable performance, and cost-effectiveness, making it a compelling option for a wide range of hydraulic systems. Its advanced additive package ensures superior wear protection, oxidation resistance, and water separation, which are crucial for maintaining machinery efficiency and longevity.

For industries seeking a high-quality hydraulic oil that balances performance with economic considerations, Shell Tellus C22 offers a dependable solution. Its compatibility with various equipment and operational environments further enhances its appeal.

Ultimately, selecting the right hydraulic oil depends on specific system requirements and operational conditions. However, Shell Tellus C22's proven track record and comprehensive performance features position it as a top contender in the field of industrial lubricants.

Disclaimer: Always consult manufacturer specifications and technical datasheets before selecting or replacing hydraulic oils to ensure compatibility and optimal performance.

Question What are the key features of the Shell Tellus C22 hydraulic oil? Shell Tellus C22 is a high-performance hydraulic oil designed to provide excellent lubrication, corrosion protection, and oxidation stability, suitable for a wide range of industrial hydraulic systems. **Is Shell Tellus C22 compatible with other hydraulic oils?** Shell Tellus C22 is formulated to meet specific specifications and can generally be used in systems requiring ISO 32 hydraulic oils. However, it's recommended to consult equipment manufacturer guidelines before mixing with other oils. **What applications are best suited for Shell Tellus C22?** Shell Tellus C22 is ideal for industrial hydraulic systems, including manufacturing machinery, mobile equipment, and other applications where high performance and protection are required. **How does Shell Tellus C22 contribute to equipment longevity?** By providing excellent anti-wear properties, oxidation stability, and corrosion protection, Shell Tellus C22 helps extend the lifespan of hydraulic components and reduces maintenance costs. **What are the storage recommendations for Shell Tellus C22?** Store Shell Tellus C22 in a cool, dry, and well-ventilated area, away from direct sunlight and incompatible materials. Ensure containers are tightly sealed to prevent contamination. **Where can I purchase Shell Tellus C22 hydraulic oil?** Shell Tellus C22 can be purchased through authorized Shell distributors, industrial supply stores, or directly from Shell's official channels. **It's recommended to buy from reputable sources to ensure product authenticity.**

Related keywords: shell tellus c22, engine oil, motor oil, synthetic oil, vehicle lubrication, automotive oil, engine maintenance, car oil specifications, motor oil brands, engine performance

Read the full article online: [SHELL TELLUS C22](#)