



MATERIAL SAFETY DATA SHEET

Page 1 of 5

RELSTAR VEGA AW 46

Revision No. 01

Date: - 15.04.2011

1. Product and Company identification

Product Name : **RELSTAR VEGA AW 46**
Product Description : Mineral Base Oils with additives
Synonyms : Hydrocarbons
C.A.S. Number : Not applicable
Hazchem Number : Not applicable
Product Application : Industrial Hydraulic Oil
Company Name : **Reliance Petro Marketing Ltd.**
5th Floor, Court House Lokmanya Tilak Marg,
Dhobi Talao,
Mumbai – 400 002, India

Emergency Number of the Company : +91 1800 223023 (Toll Free) / +91 22 60003111
E – Mail : customerservice.lubricants@ril.com

2. Composition / information on ingredients

Chemical Nature : Petroleum-derived highly refined mineral base oils with additives
Substance contributing to Hazards : None to our knowledge
Impurities contributing to Hazards : None to our knowledge

3. Hazard Identification

Adverse Human Health Effects : No specific hazards under normal use conditions. Excessive exposure could cause eye, skin or lung infection
Environmental Effects : Not classified as dangerous for the environment.
Physical and Chemical Hazards : No specific risk of fire or explosion under normal conditions of use

4. First Aid Measures

Not expected to give rise to any acute hazard under normal conditions of use.
HOWEVER IN CASE OF SERIOUS MANIFESTATION, CALL FOR A DOCTOR OR EMERGENCY MEDICAL CARE.

Route of Exposure
Inhalation : Inhalation of heavy concentration of vapors, fumes or spray, may cause mild irritation of the throat. Transport the person into fresh air, keep warm and allow to rest. If breathing is affected, assist ventilation with a mechanical device or use mouth to mouth resuscitation.
Contact with the Eyes : Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes.
Ingestion : Possible risk of vomiting and Diarrhea. Do not induce vomiting. Give nothing to drink.
Aspiration : If the product is believed to have entered the lungs (in case of vomiting, for example), take the person to Hospital for immediate care.
Contact with the Skin : If the skin is exposed to high pressure spray, the product may enter the human organs. In all such cases the affected must be taken to Hospital, even if no sign of injury can be detected.



MATERIAL SAFETY DATA SHEET
RELSTAR VEGA AW 46

Page 2 of 5

Revision No. 01

Date: - 15.04.2011

Immediately remove all soiled or stained clothing. Wash the affected area immediately and repeatedly with soap and water.

5. Fire Fighting Measures

Flash Point : 232°C (ASTM D 92)
Fire Extinguishers :
- Suitable : Foam, dry chemical or Carbon dioxide (CO₂) powder.
- Not suitable : Do not use water jets (stick jets) for extinguishing fire since they could help to spread the flames.
Fire Fighter Protection : An insulated breathing apparatus must be worn.

6. Accidental Release Measures (also refer Section 8 and 13)

After spillage / leakage
- On soil : Surface on which the product has been spilled may become slippery. Avoid discharge of the material in a stream or sewer or cause ground water contamination. Recover by physical means – pumping or with suitable absorbent. Contain and collect the spilled product with sand or any other inert material.
In the event of major spill, inform the competent authorities if the situation cannot be brought under control rapidly and efficiently.
- On water : Use floating absorbent to remove the oil mechanically.

7. Handling and Storage

HANDLING

- Technical Measures : NIL
- Prevention of user exposure : Provide adequate ventilation in case of potential formation of vapors, fumes, mist or spray. Take all measures to reduce the risk of exposure, in particular to used or waste product. Keep away from food and beverages. Avoid contact with used product.
- Prevention of Fire and Explosion : There is a fire hazard associated with rags, paper or any other material used to remove spills which become soaked. Avoid accumulation of these and they are to be disposed off safely after use.
- Precautions : Set up machinery and equipment so as to avoid the risk of accidental spill or splashes onto hot machine parts and electrical contacts. Prevent oil leaks in pressure circuits.
- Self Handling Advice : Avoid contact with strong oxidizing agents.

STORAGE

- Technical Measures : Make the necessary arrangements and take all measures to prevent ground water pollution.

RELSTAR VEGA AW 46

Revision No. 01

Date: - 15.04.2011

Storage Conditions

- Suitable : Store at room temperature, protected against contact with water and moisture, and away from any source of ignition. Keep containers closed when not in use.
- To be avoided : Do not store in open or unlabelled containers.
- Incompatible products : Dangerous reaction with strong oxidizing agents.
- Packaging Materials : Use only hydrocarbon resistant containers, joints, pipes etc.
- Recommended : Keep in original containers if possible. Otherwise, transfer all indications on the regulatory label to the new container.

8. Exposure Controls / Personal Protection**Engineering Measures**

: Use the product in well ventilated premises.
When working in enclosed place (tanks, reservoirs), make sure that the atmosphere is not suffocating and also wear recommended personal protection equipment

Occupational Exposure Limit

: Oil Mist – 5 mg/m³ – ACGIH TLV
Oil Mist – 10 mg/m³ – ACGIH STEL

Personal Protective Equipment

: Information on the selection of personal protective equipment for use with this material, as mentioned below, is based upon intended, normal usage.

- Hand Protection : Impermeable hydrocarbon proof gloves.
Recommended material – Nitrile, Neoprene
- Eye Protection : Safety Goggles with side shields, in case of splashing
- Skin and Body : As required, wear a face mask, hydrocarbon proof clothing and safety boots (during the handling of drums). Do not wear ring, watch or similar thing which will be able to hold the product and may give rise to some skin disease.

Industrial Hygiene

: Avoid prolonged and repeated contact with the skin, especially with used or waste product. Immediately remove all soiled or stained clothing. If the product comes in contact with the skin, wash the affected area immediately and repeatedly, with soap and water. Use no abrasives, solvents or petroleum spirit. Do not use cloths stained with the product to dry hands. Do not put the product soaked rags in the pockets of working cloths. Do not eat, drink or smoke while handling the product.

Practice good Housekeeping.

9. Physical and Chemical Properties**Appearance**

- Physical State : Liquid
- Color : Bright & Clear / Natural Brown
- Odor : Characteristic / Avoid smelling the product
- pH : Not Applicable
- Specific temperature for change in state : Not Applicable

- Flash Point 232°C (ASTM D 92)
- Boiling Point > 300°C



MATERIAL SAFETY DATA SHEET
RELSTAR VEGA AW 46

Page 4 of 5

Revision No. 01

Date: - 15.04.2011

Auto ignition temperature	not measurable
Explosion limits	> 350°C
Density at 29.5°C	0.8450 kg/l (Average)
Solubility	
- in water	Negligible
- in organic solvents	Completely soluble in Hexane
Kinematic Viscosity at 40°C	46.00 cSt Typical
Melting / Freezing Point	Not applicable
Vapor Pressure at 35°C	14.7 psi (normal ATP)
Vapor Density (Air = 1)	< 1

10. Stability and Reactivity

Stability : The product is stable under normal temperature of storage, handling and use.

Dangerous Reactions : No dangerous reactions known under normal conditions of use.

- Conditions to avoid : Heat (temperature above Flash Point), sparks, ignition points, flames, static electricity

- Materials to avoid : Avoid contact with strong oxidizing agent

Dangerous decomposition products : Incomplete combustion and thermolysis produce more or less toxic gases such as CO, CO₂, various hydrocarbons, aldehydes and soot.

11. Toxicological Information

ACUTE TOXICITY / LOCAL EFFECTS

- Inhalation : Risk is improbable under normal condition of use. Inhalation of concentration of vapors may cause irritation of the upper respiratory system.

- Contact with the skin : Risk is improbable under normal conditions of use. If the skin is exposed to high pressure spray, the product may enter the human organs. In all such cases the affected person must be taken to hospital, even if no sign of injury can be detected

- Ingestion : In case of ingestion of small quantities, no important effect observed
Ingestion of larger amounts may cause abdominal pain, diarrhea.

- Sensitization : To our knowledge, the product doesn't induce sensitization

CHRONIC TOXICITY OR LONG TERM TOXICITY

- Contact with the skin : Characteristic skin affections (oil blisters) may develop, following prolonged and repeated exposure through contact with stained clothing.

12. Ecological Information

Mobility

- Air : there is a slow loss by evaporation.



MATERIAL SAFETY DATA SHEET
RELSTAR VEGA AW 46

Page 5 of 5

Revision No. 01

Date: - 15.04.2011

- Ground : Given its physical and chemical characteristics, the product generally shows little mobility in the ground. The product is insoluble in water and would float on the surface of water.

Persistence and Degradability : Experimental data on the finished product are not available.

Ecotoxicity : The virgin product is considered to present no danger for land growing organisms. It is considered to present a little danger for aquatic life.

13. Disposal considerations

Waste disposal : Dispose in a safe manner in accordance with local / national regulations. If needed, collection by an authorized waste agency and regeneration or incineration in an approved installation.

Empty container WARNING : Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery or disposal through suitably qualified or licensed agency and in accordance with local governmental regulations.

DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION.

14. Transport Information

Land / Sea / Air : Not regulated for Land / Sea / Air transport.

15. Regulatory Information

When used for its intended purpose, this material is not classified as hazardous.
EU Labeling: Not regulated according to EC directives.

16. Other Information

This Material Safety Data Sheet serves to complete but not to replace the Product Data Sheet. The information contained herein given in good faith and is accurate and reliable to the best of our knowledge and belief.

It is understood by the user that, any use of the product for purpose other than those for which it was designed, entails potential risk. It is the user's responsibility to satisfy him that the product is suitable for the intended use only.

The information given herein in no way dispenses the user from knowing and applying all provisions regulating his or her activity. The user bears sole liability for the precautions required when using the product.

The regulatory texts indicated herein are intended to aid the user to fulfill his obligations.

It is the user's responsibility to ensure that he is subject to no other obligation than those mentioned. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and / or on container. Appropriate warnings and safe handling procedures should be provided to handlers and users.

Alteration of this document is strictly prohibited.