# Safety Data Sheet

**Martin Lubricants;**
**A division of Martin Operating Partnership, LP**
484 East 6th Street
Smackover, AR 71762
USA

**Emergency:** **ChemTrec 800-424-9300**
Information: 870-881-8700
Fax: 870-864-8656
Revision Date: 03/14/2013

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

| | |
|---|---|
| **Product:** | **NAPA AW 32 Hydraulic**<br>**NAPA AW 46 Hydraulic**<br>**NAPA AW 68 Hydraulic**<br>**NAPA RO Hydraulic** |
| **CAS Registry Number:** | Not applicable for mixtures |
| **Synonyms:** | Hydraulic Fluid, Anti-wear Hydraulic Fluid, Oil, Rust and Oxidation Hydraulic Fluid, MVI Hydraulic Fluids, AW Hydraulic Oils, R&O Hydraulic Oils |
| **Generic/Chemical Name:** | Petroleum hydrocarbon fluid |
| **Product Type:** | Industrial hydraulic fluid |

## SECTION 2 HAZARDS IDENTIFICATION

| | NPCA-HMIS | KEY |
|---|---|---|
| **HEALTH:** | 1 | 0 = Minimal |
| **FIRE:** | 1 | 1 = Slight |
| **REACTIVITY:** | 0 | 2 = Moderate |
| **SPECIFIC HAZARD:** | N/A | 3 = Serious |
| **PROTECTION INDEX:** | B | 4 = Severe |

**WARNING:** NONE REQUIRED

**Eye Contact:** This product is not normally expected to cause eye irritation. Avoid prolonged contact with the eyes, which may cause mild eye discomfort, tearing, or blurring of vision. Based on data from similar materials.

**Skin Contact:** This product is not expected to cause skin irritation. Prolonged or repeated contact may lead to an allergic skin sensitization in some people and dermatitis (dryness, chapping and reddening of skin). Based on component data and data from similar materials.

**Inhalation:** Overexposure by inhalation of hot material may cause nonspecific discomfort, such as nausea, headache, or weakness. Caution should be taken to prevent forming aerosol or misting of this product without proper respiratory protection.

**Ingestion:** Do not ingest. Due to the expected concentration of oil (70-100%) ingestion is expected to be relatively non-toxic unless lung aspiration occurs. Aspiration may lead to chemical pneumonitis, which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting with a further risk of aspiration. This product has laxative properties and may result in abdominal cramps and diarrhea.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

| INGREDIENTS | CAS # | % | ACGIH TWA | OSHA PEL | OSHA STEL | SKIN |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Severely hydro-treated naphthenic mineral oil | Mixture | 90-100 | 5 mg/m³ (oil mist) | 5 mg/m³ (oil mist) | 10 mg/m³ (oil mist) | NO |
| Paraffinic base oil | Mixture | <10 | 5 mg/m³ (oil mist) | 5 mg/m³ (oil mist) | 10 mg/m³ (oil mist) | NO |
| Zinc Dialkyl Dithiophosphate | 68649-42-3 | <0.5 | 5 mg/m³ (oil mist) | 5 mg/m³ (oil mist) | 10 mg/m³ (oil mist) | NO |

## SECTION 4 FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists call a physician. If material is hot, treat for thermal burns and take victim to hospital immediately.

**Skin Contact:** Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately. Wash contaminated clothing before reuse.

**Inhalation:** If overcome by inhalation of hot vapors, remove to fresh air. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

**Ingestion:** DO NOT INDUCE VOMITING. Do not induce vomiting due to aspiration hazard. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Should vomiting occur; lower head below knees to avoid aspiration. Seek immediate medical attention.

## SECTION 5 FIRE FIGHTING MEASURES

**Flash Point:** by Cleveland Open Cup, ASTM D 92

| RO | AW22 | AW32 | AW46 | AW68 |
|---|---|---|---|---|
| 188°C | 160°C | 168°C | 182°C | 198°C |
| 370°F | 320°F | 334°F | 360°F | 388°F |

**Upper Flammable Limit:** Not determined

**Lower Flammable Limit:** Not determined

**Extinguishing Media:** Use dry chemical, foam, water fog or carbon dioxide

**Special Fire Fighting Procedures:** Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

**Unusual Fire and Explosion Hazards:** Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. Heavy flammable vapors may settle along ground level and low spots to create an invisible fire hazard. The vapors may extend to sources of ignition and flash back.

**By-products of Combustion:** Oxides of C, Zn, Ca, P, S, and N. Additional byproducts include hydrogen sulfide, alkyl mercaptan and other sulfides

**Auto-ignition Temperature:** Not determined

**Explosion Data:** Not determined. Care should always be exercised in dust/mist areas.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Spill Procedures (Land):** Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, and heaters). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities.

**Spill Procedures (Water):** Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities.

**Waste Disposal Method:** All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation regulations may apply for transporting this material when spilled. See Section 14.

CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

## SECTION 7 HANDLING AND STORAGE

**Handling Procedures:** Keep containers closed when not in use. Do not transfer to unmarked containers. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106 -- Flammable and Combustible Liquids. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

**Storage Procedures:** Store containers away from heat, sparks, open flame, or oxidizing materials.

**Additional Information:** No additional information.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**Personal Protection:** Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.

**Respiratory Protection:** None required if airborne concentrations are maintained below threshold limits listed on page 1. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air- purifying respirator.

**Eye Protection:** Eye protection is always recommended. If material is handled such that it could be splashed into the eyes, wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).

**Hand Protection:** Impervious gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.

**Other Protection:** Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials, which cannot be decontaminated.

**Local Control Measures:** Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored.

**Other:** Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking, or smoking.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Vapor Pressure:** Negligible at STP (Standard Temperature and Pressure, 25°C at 1 ATM)

| **Gravity** by ASTM D 1298**:** | RO | AW22 | AW32 | AW46 | AW68 |
|---|---|---|---|---|---|
| API Gravity | 23.1 | 24.7 | 23.4 | 23.1 | 23.3 |
| Specific Gravity @ 15.6°C | 0.9150 | 0.9059 | 0.9140 | 0.9150 | 0.9141 |
| Density @ 15.6°C | 7.636 | 7.543 | 7.607 | 7.622 | 7.612 |

**Solubility** Negligible in water, soluble in hydrocarbon solvents

**Percent Volatile:** Negligible at STP

**Vapor Density, Air = 1:** >1 at STP

**Evaporation Rate, n-Butyl Acetate = 1:** Negligible at STP

**Odor:** Mild petroleum hydrocarbon odor

**Appearance:** Amber, clear fluid

| **Viscosity** by ASTM D 445**:** | RO | AW22 | AW32 | AW46 | AW68 |
|---|---|---|---|---|---|
| cSt at 40°C (212°F) | 46.90 | 19.77 | 30.37 | 44.97 | 64.66 |
| cSt at 100°C (212°F) | 5.70 | 3.56 | 4.62 | 5.68 | 6.97 |

**Boiling Point:** Not determined. Expected to be > 260°C (500°F).

| **Pour Point** (°C)**:** | RO | AW22 | AW32 | AW46 | AW68 |
|---|---|---|---|---|---|
| by ASTM D 97 | -36 | -42 | -39 | -35 | -34 |

**Molecular Weight:** Not determined.

## SECTION 10 STABILITY AND REACTIVITY

**Stability:** Material is stable at room temperature and pressure.

**Conditions To Avoid:** Avoid high temperatures and product contamination.

**Incompatibility With Other Materials:** Avoid contact with acids and oxidizing materials.

**Decomposition Products:** Smoke, carbon monoxide and dioxide, and other aldehydes of incomplete combustion. Oxides of C, Zn, Ca, P, S and N. Hydrogen sulfide and alkyl mercaptans and other sulfides may be released.

**Hazardous Polymerization:** Will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

**Oral Toxicity:** Not determined.

**Dermal Toxicity:** Not determined.

**Inhalation Toxicity:** On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptotic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.

**Dermal Sensitization:** Prolonged or repeated contact may make skin more sensitive to other skin sensitizers. Based on data from similar materials.

**Chronic Toxicity:** Not determined.

**Carcinogenicity:** Not determined.

**Mutagenicity:** This product contains zinc alkyl dithiophosphates (ZDP). Several ZDPs have been reported to have weak mutagenic activity in cultured mammalian cells but only at concentrations that were toxic to the test cells. We do not believe that there is any mutagenic risk to workers exposed to this product's concentration level of ZDP..

**Reproductive Toxicity:** Not determined.

**Teratogenicity:** Not determined.

**Other:** This product contains petroleum base oils, which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

## SECTION 12 ECOLOGICAL INFORMATION

**Environmental Toxicity:** This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

**Environmental Fate:** If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structure resulting in suffocation is spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress in birds and mammals through ingestion.

This product is rapidly biodegradable. Biodegradation is possible with 100 to 120 F (21C).

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

**Disposal Consideration:** Place used, contaminated, or excess material into disposable containers and dispose of in a manner consistent with local and state regulations. Contact local environmental or health authorities for approved disposal of this material. Most used oil is reclaimed or incinerated.

## SECTION 14 TRANSPORT INFORMATION

**U.S. DOT Information**

**Bulk Shipping Description:** Does not apply to bulk oil shipping.

| | |
|---|---|
| **Non-Bulk Shipping Description:** | Does not apply to non-bulk oil shipping. |
| **Identification Number:** | Not applicable. |
| **Hazard Classification:** | Not applicable. |
| **Other:** | See 49 CFR for additional requirements for descriptions, allowed modes of transport, and packaging. For more information concerning spills during transport, consult latest DOT Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3. |

## SECTION 15 REGULATORY INFORMATION

**Clean Water Act/Oil Pollution Act:** Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spills or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface water must be reported. Contact the National Response Center at 800-424-8802.

**TSCA:** All components of this material are listed in the U.S. TSCA Inventory.

**Other TSCA:** Not applicable.

**SARA Title III:**

| | | |
|---|---|---|
| Section 302/304 | Extremely Hazardous Substances: | None |
| Section 311/312 | <u>Hazard Categorization:</u> | |
| | Acute (immediate health effects): | Yes |
| | Chronic (delayed health effects): | No |
| | Fire (hazard): | No |
| | Reactivity (hazard): | No |
| | Pressure (sudden release hazard): | No |
| Section 313 | Toxic Chemicals: | Zinc < 0.10% |

**CERCLA:**

| | |
|---|---|
| For stationary sources - reportable quantity: | Not determined. |
| Due to: | Not applicable. |
| For moving sources - reportable quantity: | Not determined. |
| Due to: | Not applicable. |

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

**California Prop. 65:** Not applicable.

## SECTION 16 OTHER INFORMATION

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Martin Lubricants, a division of Martin Operating Partnership, LP must rely upon information provided by the material manufacturers or distributors.

Prepared by: David Collins
File: SDS – NAPA AW-RO Hydraulic Oil

INFORMATION PROVIDED IN THIS MSDS IS CONSIDERED ACCURATE AND RELIABLE BASED ON INFORMATION ISSUED FROM INTERNAL AND OUTSIDE SOURCES TO THE BEST OF MARTIN LUBRICANTS, A DIVISION OF MARTIN OPERATING PARTNERSHIP, LP'S KNOWLEDGE; HOWEVER, MARTIN LUBRICANTS, A DIVISION OF MARTIN OPERATING PARTNERSHIP, LP MAKES NO REPRESENTATIONS, GUARANTEES OR WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, REGARDING THE ACCURACY OF SUCH INFORMATION OR THE RESULT TO BE OBTAINED FROM THE USE THEREOF, OR AS TO THE SUFFICIENCY OF INFORMATION HEREIN PRESENTED. MARTIN LUBRICANTS, A DIVISION OF MARTIN OPERATING PARTNERSHIP, LP ASSUMES NO RESPONSIBILITY FOR INJURY TO RECIPIENT OR TO THIRD PERSONS OR FOR ANY DAMAGE TO ANY PROPERTY AND RECIPIENT ASSUMES ALL SUCH RISKS.