Material Safety Data Sheet

Section1. Chemical Product and Company Identification. Name: **Flame-Out 220 Fire Resistant Hydraulic Fluid**
Code / Part Number: 9639,9640
Manufacturer: SPX Fluid Power
5885 11th Street
Rockford, IL 61109, USA
Phone: 815-874-5556

CHEMTREC 24 Hr Emergency Number: 800-424-9300
Material Use: The product designed for use in high temperature heavy duty hydraulic fluid applications.
Validated on January, 2004

Section 2. Composition and Information on Ingredients.
Name: Synthetic Polyolester and proprietary additives
CAS#: Mixture
% (V/V): 100
Exposure Limits:
TLV-TWA (8hr): not established
STLE: not established
Manufacturer Recommendation: Not applicable
Other Exposure Limits: Consult local, state, provincial or territorial authorities for acceptable exposure limits.

Section 3. Hazardous Identification.
Potential Health Effects: Not irritating to slight irritation to skin and eyes with no permanent damage. Relatively non-toxic via ingestion. This product has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions. At high temperatures or mechanical actions may produce vapors or mists, inhalation may cause irritation of the breathing passages. See section 11.

Section 4. First Aid Measures
Eye contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.
Skin Contact: Remove contaminated clothing – launder before reuse. Wash contaminated skin with running water and non-abrasive soap. Get medical attention if irritation develops or if product is injected under pressure into or under the skin.
Inhalation: Remove to fresh air. Get medical attention if breathing difficulty persists. If victim is not breathing, perform artificial respiration.
Ingestion: DO NOT induce vomiting. Seek medical attention.

Section 5. Fire-fighting Measures
Flammability: May be combustive at high temperature.
Flash point: 260 deg C (500 deg F) (COC)
Flammable Limits: Not available
Auto-Ignition Temperature: Not available
Fire Hazard in Presence of Various Substances: Low fire hazard. This material must be heated before ignition will occur.
Explosion Hazards in Presence of Various Substances: Do not cut, weld, drill or pressurize empty container. Containers may explode in heat of fire.
Products of Combustion: various oxides of carbon, nitrogen, sulfur, phosphorus, smoke and irritating vapors from incomplete combustion.
Fire Fighting Media Instructions: NAERG96, Guide 171, Substances (low to moderate hazard). If tank, rail car or tank is involved in fire, ISOLATE for 800 meters (0.5 mile) in all directions. Shut off fuel to fire if it is possible to do without hazard. If it is not possible, withdraw from area and let fire burn out under controlled conditions. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Cool

containing vessels with water spray in order to prevent pressure build-up, auto ignition or explosion.
Small fire: use DRY chemicals, foam, water spray or CO2.
Large Fire: use water spray, fog or foam. For small outdoor fires, portable fire extinguishers may be used. For all indoor fires and significant outdoor fires self-contained breathing apparatus is required. Respiratory and eye protection are required for fire fighting personnel.

Section 6. Accidental Release Measures
Material Release or Spill: NAERG96, Guide 171, Substances (low to moderate hazard). ELIMINATE ALL IGNITION SOURCES. Avoid contact. Stop leak if without risk. Contain spill. Absorb with inert absorbents. Place used absorbent in closed metal containers for later disposal or burn absorbent in suitable combustion chamber. DO NOT FLUSH TO SEWERS, STREAMS OR OTHER BODIES WATER. Check with applicable jurisdiction for specific disposal requirements of spilled materials and empty containers. Notify the appropriate authorities immediately.

Section 7. Handling and Storage.
Handling: Avoid inhalation and skin contact especially when handling used oil. Keep away from sources of ignition. Do not reuse empty containers without commercial reconditioning. Practice good personal hygiene. Wash hands after handling oil and before eating. Launder work clothes frequently. Discard saturated leather goods.
Storage: Store in tightly closed containers in cool, dry, isolated, well-ventilated area, and away from incompatibles.

Section 8. Exposure Control / Personal Protection.
Engineering Controls: For normal application, special ventilation is not necessary. If user's operations generate vapors or mists, use ventilation to keep contaminants low. Make-up air should always be supplied to balance air removed by exhaust. Have eyewash station and safety-shower close to workstation.
Personal Protection:
Eyes: Eye protection should be determined based on conditions of use. If product is used in application where splashing may occur, the use of safety goggles and/or a face shield should be considered.
Hands and Body: Wear appropriate chemically protective gloves and wear appropriate clothing to prevent skin contact.
Respiratory: NIOSH approved respirators should be used when airborne contamination are high.
Feet: Wear appropriate footwear to prevent product form coming in contact with feet and skin.

Section 9. Physical and Chemical Properties.
Appearance, Physical State: Clear, Amber Liquid
Odor: Mild ester odor
Viscosity: 46 cSt @ 40 deg C
Flash Point: 260 deg.C (500deg. F)
Vapor Pressure: Negligible at ambient temperature and pressure
Specific Gravity: 0.909kg/L @ 25 deg. C (60 deg.F)
Water solubility: Insoluble in water
pH: Not applicable

Section 10. Stability and Reactivity
Stability: Stable under normal handling and storage condition
Hazardous Polymerization: Will not occur at normal working conditions.
Incompatible Substances / Conditions to Avoid: strong oxidizing agents and acids.
Decomposition Products: Combustion can yield carbon, nitrogen, sulfur, phosphorus, and zinc oxides.

Section 11. Toxicological information

Routes of entry: Skin and eye contact, inhalation, ingestion.
Acute Lethality: Based on toxicity of components.
Acute oral toxicity (LD50): >10mL/kg rat.
Chronic or Other Toxic Effects.
Dermal Route: Prolonged or repeated contact may cause skin irritation characterized by dermatitis or oil acne.
Inhalation Route: Negligible breathing hazard at normal temperature. Elevated temperatures or mechanical action may form vapors, mists or fumes. Inhalation of oil mists or vapors from hot oil may cause irritation of the upper respiratory track.
Oral Route: Low toxicity.
Eye Irritation / Inflammation: Repeated or prolonged contact may cause irritation but not permanent damage.
Immunotoxicity: Not available.
Skin Sensitization: Not expected to be skin sensitizer.
Respiratory Tract Sensitization: Not expected to be respiratory tract sensitizers.
Carcinogenicity: This product is not known to contain any chemicals at reportable quantities that are listed as carcinogens by NTP, IARC, OSHA.
Other Considerations: No additional remark.

Section 12. Ecological Information

Environmental Impact: This product does not contain any hazardous substances which are reportable under DOT or CERCLA.
Environmental Fate and Effects: Under the Modified Sterm Test (40 CFR 796.3620), this product is readily biodegradable.
Aquatic Toxicity: Acute LC/EC50 (Fish) – This product is non-toxic. (LC50 > 2000ppm). Based on testing ofthis product or a similar product.
Additional Remarks: No additional remarks.

Section 13. Disposal Considerations

Waste Disposal: Spent/used/waste oil may meet the requirements of a hazardous waste. Consult your local or regional authorities. Preferred waste management priorities are: (1) recycle or reprocess, (2) incinerate with energy recovery, (3) disposal at licensed waste disposal facility. Ensure that disposal or reprocessing is in compliance with government requirements and local disposal regulations.

Section14. Transport Information

TDG Classification: Not controlled under TDG (Canada).
DOT Shipping Description: Not classified as hazardous.
Special Provisions for Transport: Not applicable.

Section 15. Regulatory Information

This product is acceptable for use under the provisions of WHMIS-CPR. All components of this formulation are listed on the CEPA-DSL (Domestic Substances List).

All components of this formulation are listed on the US EPA-TSCA Inventory.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required By the CPR.

This product is not known to contain any chemicals at reportable quantities that are listed on the SARA 313 and 40 CFR 372.

This product is not controlled under the HCS.

HMIS (USA): Health Hazard 1
Fire Hazard 1
Reactivity 0
Personal Protection B

NFPA (USA): Health Hazard 1
Fire Hazard 1
Reactivity 0
Specific Hazard none

Rating: 0 Insignificant
Slight
Moderate
High
Extreme

Section 16. Other Informations

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