

Safety Data Sheet

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 3.

Revision date: Initial version

Date of issue: Feb.21, 2015

Product name: Flame-Out 220

SECTION 1: Identification

Product identifier:	Flame-Out 220.
Synonyms:	Fire Resistant Hydraulic Oil.
Product Code:	9639, 9640.
SDS number:	CGF005
Recommended use:	Hydraulic Lubricant.
Recommended restrictions:	None known.

Manufacturer/Importer/Supplier/Distributor information:

Company Name:	SPX Hydraulic Technologies.
Company Address:	5885 11th Street Rockford, IL 61109
Company Telephone:	Office hours (Mon – Fri) 8.00am – 5:00pm (CST) (815) 874-5556
Company Contact Name:	EH&S Department.
Emergency phone number:	INFOTRAC 24 Hour Emergency Numbers: USA, Canada, Puerto Rico (800) 535-5053. International (352) 323-3500.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Physical hazards

Not classified as a physical hazard under GHS criteria.

Health hazards

Not classified as a health hazard under GHS criteria.

Environmental hazards

Not classified as an environmental hazard under GHS criteria.

GHS Signal word: Not applicable.

GHS Hazard statement(s): Not applicable.

GHS Hazard symbol(s): Not applicable.

GHS Precautionary statement(s):

- Prevention:** No prevention precautionary phrases.
- Response:** No response precautionary phrases.
- Storage:** No storage precautionary phrases.
- Disposal:** No disposal precautionary phrases.

Hazard(s) not otherwise

Classified (HNOC): None known.

Percentage of ingredient(s) of unknown acute toxicity:

Not applicable.

SECTION 3: Composition/information on ingredients

Substance: No hazardous components

Chemical name	Concentration (weight %)	CAS#
Synthetic Lubricant Base Oil	> 94	Proprietary
Non-Hazardous Materials	< 6	Various

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret due to the proprietary nature of one of the components.

SECTION 4: First-aid Measures

Inhalation: First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. Seek immediate medical attention.

Skin contact: Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician (see Indication of immediate medical attention below).

Eye contact: If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Ingestion: First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

Most important symptoms/effects, acute and delayed: Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation. Accidental ingestion can result in minor irritation of the digestive tract, nausea and diarrhea. Dry skin and possible irritation with repeated or prolonged exposure.

Indication of immediate medical attention and special treatment needed: Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities. When using high-pressure equipment, injection of product under the skin can occur. In this case, the casualty should be sent immediately to the hospital. Do not wait for symptoms to develop. High-pressure hydrocarbon injection injuries may produce substantial necrosis of underlying tissue despite an innocuous appearing external wound. These injuries often require extensive emergency surgical debridement and all injuries should be evaluated by a specialist in order to assess the extent of injury. Early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F / 100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Unsuitable extinguishing media: Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Specific hazards arising from the chemical:

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulfur, nitrogen or phosphorus may also be formed.

Special protective equipment and precautions for fire-fighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. If spill occurs on water notify appropriate authorities and advise shipping of any hazard. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center.

Methods and materials for containment and cleaning up:

Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

SECTION 7: Handling and Storage

Precautions for safe handling: Keep away from flames and hot surfaces. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8). Spills will produce very slippery surfaces. High pressure injection of hydrocarbon fuels, hydraulic oils or greases under the skin may have serious consequences even though no symptoms or injury may be apparent. This can happen accidentally when using high pressure equipment such as high pressure grease guns, fuel injection apparatus or from pinhole leaks in tubing of high pressure hydraulic oil equipment.

Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Do not wear contaminated clothing or shoes.

Conditions for safe storage, including any incompatibles: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance	PEL-TWA (8 hour)	PEL-STEL (15 min)
Synthetic Lubricant Base Oil	5 mg/m ³ (as Oil Mist, if generated)	No data available

US ACGIH Threshold Limit Values		
Substance	TLV-TWA (8 hour)	TLV-STEL (15 min)
Synthetic Lubricant Base Oil	5 mg/m ³ (as Oil Mist, if generated)	10 mg/m ³ (as Oil Mist, if generated)

US NIOSH Guidelines		
Substance	REL - TWA	STEL
Synthetic Lubricant Base Oil	No data available	No data available

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Appropriate engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Individual protection measures, such as personal protective equipment:

Eye/face protection: The use of eye/face protection is not normally required; however, good industrial hygiene practice suggests the use of eye protection that meets or exceeds ANSI Z.87.1 whenever working with chemicals.

Skin and Hand protection: The use of skin protection is not normally required; however, good industrial hygiene practice suggests the use of gloves or other appropriate skin protection whenever working with chemicals. Suggested protective materials: Nitrile.

Respiratory protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Thermal hazards: No data available.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

SECTION 9: Physical and chemical properties

Appearance

Physical state:	Liquid.
Form:	Liquid.
Color:	Amber, Transparent.
Odor:	Petroleum.
Odor threshold:	No data available
pH:	Not applicable
Melting point/freezing point:	No data available
Initial Boiling Point/Range:	No data available
Flash point:	> 500°F / >260°C (Test Method: Cleveland Open Cup (COC), ASTM D92)
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower (%):	No data available
Flammability limit – upper (%):	No data available
Explosive limit – lower (%):	No data available
Explosive limit – upper (%):	No data available
Vapor pressure:	< 1 mm Hg
Vapor density:	> 1 (air=1)
Specific gravity:	0.919 @ 68°F (20°C)
Solubility in water:	Insoluble.
Partition coefficient (n-octanol/water):	No data available

Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: 10 - 15 cSt @ 100°C; 41 - 75 cSt @ 40°C

Other information

Bulk density: 7.65 lbs/gal
Pour point: < -4°F / < -20°C

SECTION 10: Stability and Reactivity

Reactivity: Not chemically reactive.
Chemical stability: Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions: Hazardous reactions not anticipated.
Conditions to avoid: Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.
Incompatible materials: Avoid contact with strong oxidizing agents and strong reducing agents.
Hazardous decomposition Products: Not anticipated under normal conditions of use.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: Inhalation is not a likely route of exposure.
Ingestion: Ingestion is not a likely route of exposure.
Skin: Skin contact is a likely route of exposure.
Eye: Eye contact is a likely route of exposure.

Symptoms related to the physical, chemical, and toxicological characteristics:
None known.

Delayed and immediate effects and chronic effects from short or long-term exposure:
None known.

Acute toxicity:

Product/Ingredient Information:

Substance	Test Type (species)	Value
Synthetic Lubricant Base Oil	LD ₅₀ Oral (Rat)	>5000 mg/kg (estimated)
	LD ₅₀ Dermal (Rabbit)	>2000 mg/kg (estimated)
	LC ₅₀ Inhalation (Rat)	> 5 mg/L (mist, estimated)

Skin corrosion/irritation: Not expected to be irritating. Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation: Not expected to be irritating.

Respiratory sensitization: No information available.

Skin sensitization: No information available.

Germ cell mutagenicity: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

Carcinogenicity: No information available on the mixture, however none of the components have been classified for carcinogenicity (or are below the concentration threshold for classification).

Reproductive toxicity: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

**Specific target organ toxicity-
Single exposure:** No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification).

**Specific target organ toxicity-
Repeat exposure:** No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification).

Aspiration hazard: Not expected to be an aspiration hazard.

SECTION 12: Ecological information

**Ecotoxicity:
Ingredient Information:**

Substance	Test Type	Species	Value
Synthetic Lubricant Base Oil		Fish	No data available
		Invertebrate	No data available
		Algae	No data available

Toxicity:	Experimental studies with rainbow trout, daphnia, and fresh water algae indicate that synthetic base oils are not expected to be harmful to aquatic organisms.
Persistence and degradability:	Synthetic base oils are not considered to be readily biodegradable but may be inherently biodegradable. They are expected to completely biodegrade over extended periods of time.
Bioaccumulative potential:	Not expected to bioaccumulate.
Mobility in soil:	Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material.
Mobility in general:	In water, this material will float and spread over the surface at a rate dependent upon viscosity. The main fate process is expected to be slow biodegradation of individual components in soil and sediment.
Other adverse effects:	None anticipated.

SECTION 13: Disposal considerations

Disposal instructions:

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste and is not believed to exhibit characteristics of hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste. This material under most intended uses would become "Used Oil" due to contamination by physical or chemical impurities. Whenever possible, Recycle used oil in accordance with applicable federal and state or local regulations. Container contents should be completely used and containers should be emptied prior to discard.

SECTION 14: Transport Information

U.S. Department of Transportation (DOT)

Shipping Description:	Not regulated
Note:	If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil).

International Maritime Dangerous Goods (IMDG)

Shipping Description:	Not regulated
-----------------------	---------------

Note: U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 25.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
Not applicable.

International Civil Aviation Org. / International Air Transport Assoc. (ICAO/IATA)

UN/ID #: Not regulated

Note: U.S. DOT compliance requirements may apply. See 49 CFR 171.22, 23 & 24.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is not classified as hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All components are either listed on the US TSCA Inventory, or are not regulated under TSCA.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:

Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4: This product does not contain chemicals listed on CERCLA.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
Not listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Not listed.

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): Not listed.

Section 311/312 (40 CFR 370):

Immediate Hazard: No

Delayed Hazard: No

Fire Hazard: No

Pressure Hazard: No

Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372): Not listed.

U.S. Export Control Classification Number: EAR99

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986): This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

Massachusetts Oil and Hazardous Materials List: No components are listed on the Massachusetts Oil and Hazardous Materials List.

Minnesota Hazardous Substance List: No components are listed on the Minnesota HSL.

New Jersey Environmental Hazardous Substances List: No components are listed on the New Jersey HSL.

Pennsylvania Hazardous Substance List: No components are listed on the Pennsylvania HSL.

Canada

WHMIS (Canada) Not controlled under WHMIS (Canada).

CANADA INVENTORY (DSL): All components are either on the DSL, or are exempt from DSL listing requirements.

SECTION 16: Other Information

Revision Date: February 21, 2015

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However SPX Hydraulic Technologies does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.