

SDS: FLUIDAL NAPATHENIC BASE OIL 100

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Fluidal 100
 Chemical Name: Severely Hydrotreated Light Naphthenic Distillate
 Chemical Family: Petroleum Disillate
 Chemical Formula: Not applicable
 CAS Number: 64742-52-5
 Other Designations: Contains Oil
 Manufacturer: Fluids, Inc. 4271 Rifle Range Rd., Vicksburg, MS 39180

EMERGENCY TELEPHONE NUMBERS:
 Chemtrec (800) 424-9300 After Business Hours

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces finished oil with a viscosity near 100 SUS @ 100°F (9.6 cSt @ 40°C).

Ingredient Name	CAS Number	% vol
Severely Hydrotreated Light Naphthenic Petroleum Oil	64742-52-5	100.0

Trace Ingredients

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		
	TWA	STEL	TWA	STEL	TWA	STEL	NIOSH IDLH
Severely Hydrotreated Light Naphthenic Petroleum Oil	5 mg/m3	None	5 mg/m3	10 mg/m3	None	None	None
	(Oil Mist)	estab.	(Oil Mist)	(Oil Mist)	estab.	estab.	estab.

SECTION 3 – HAZARDS IDENTIFICATION

****Emergency Overview****

Not expected to cause a severe emergency hazard

Primary Entry Routes: Skin

Inhalation: Inhalation of vapors or mist may be irritating to respiratory passages. Target Organ for mineral oil mist is lungs. Prolonged exposure may result in dizziness and nausea.
 Eye: Eye contact may result in slight irritation and redness.
 Skin Short term contact with skin is unlikely to cause any problems; excessive or prolonged and repeated contact and poor hygiene conditions may result in dryness, dermatitis, erythema, oil acne, cracking and defatting of the skin.
 Ingestion: May result in nausea or stomach discomfort.

HMIS
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F 1
R 0
PPE*

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Carcinogenicity: Based on OSHA 1910.1200 and IARC study requirements, this product does not require labeling. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. NTP and OSHA do not list this product as a potential carcinogen.

Mutagenicity: This product gives negative mutagenic results from Modified Ames Assay.

Medical Conditions Aggravated by Long-Term Exposure: Personnel with pre-existing skin disorders should avoid contact with this product.

SECTION 4 – FIRST AID MEASURES

Eye Contact: Wash with water. If irritation or redness persists seek medical help.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Reuse only after cleaning.

Inhalation: Remove to fresh air. Assist breathing if necessary. Seek medical help.

Aspiration: If there is any suspicion of aspiration into the lungs, obtain medical advice.

Ingestion: If swallowed, observe for signs of stomach discomfort or nausea. If symptoms persist, seek medical help. Do not induce vomiting.

SECTION 5 – FIRE- FIGHTING MEASURES

Flash Point: > 325°F (>163°C)

Flash Point Method: COC

Burning Rate: Not available

Autoignition Temperature: >600 °F (>315°C)

Lower Explosive Level (LEL): Not determined

Upper Explosive Level (UEL): Not determined

Flammability Classification: OSHA Class III-B Combustible Liquid.

Extinguishing Media: Halon, dry chemical, foam, CO2, and water mist or fog. Water may be used to cool below flash point.

Unusual Fire or Explosion Hazards: Do not use forced stream as this could cause fire to spread.

Combustion Products: Fumes, smoke, and carbon monoxide.

Fire-Fighting Instruction and Equipment: Use water to cool containers exposed to flames. Do not enter enclosed or a confined workspace without proper protective equipment. Fire Fighting personnel should wear respiratory protection (positive pressure if available).

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SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill/Leak Procedures: Stop spill at source if possible without risk. Contains spill. Eliminate sources of ignition. Spill area will be slick. Recover all possible material for reclamation. Use non-flammable absorbent material to pick up remainder of spill.

Spill to Navigable Water: If this material is spilled into navigable waters and creates a visible sheen. It is reportable to the National Response Center.

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SECTION 7 – HANDLING AND STORAGE

Handling and Storage Precautions: Keep away from flames, sparks, or hot surfaces. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapors. NFPA Class 111B storage. Wash thoroughly after handling.

Work/Hygiene Practices: Wash hands with soap and water before eating, drinking, smoking or use of toilet facilities. Do not use gasoline, solvents, kerosene, or harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before reuse. Discard contaminated shoes and leather gloves.

Shelf Life: Product should be stored in clean, dry containers at ambient temperatures and it should remain stable with exception of slight color stability loss unless it is contaminated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Adequate ventilation is required where excessive heating or agitation may occur to maintain concentration below exposure limits.

Eye/Face Protection: Safety glasses or face shield where splashing is possible.

Skin Protection: As needed to prevent repeated skin contact. Solvent resistant gloves should be used if needed.

Respiratory Protection: Not normally needed. Respirator should be used in areas where vapor concentrations are excessive due to high temperatures or where oil mixing occurs.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Water Solubility: Nil

Appearance: Clear & Bright

Boiling Point: Not determined

Color: Water white to pale of light amber

Melting Point: -40°F (-40°C)

Odor: Mild Petroleum Odor

Odor Threshold: Not determined

% Volatile: Nil (LVP-VOC)

Vapor Pressure: Not applicable

Evaporation Rate: Not Applicable

Vapor Density (Air=1): >5

pH: Not applicable

Specific Gravity (H₂O=1): 0.90

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Polymerization: Polymerization will not occur.

Chemical Incompatibilities: Strong Oxidizers.

Conditions to Avoid (Stability): Sources of ignition.

Hazardous Decomposition Products: Combustion products include carbon dioxide and carbon monoxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity: Tests on similar materials show a low order of acute oral and dermal toxicity.

Acute Oral Effects: Tests on similar materials indicate low order of acute oral toxicity

Acute Inhalation Effects: Low acute toxicity expected on inhalation.

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Eye Irritation: Minimal irritation on contact. Eye irritation slight or practically non-irritating based on similar products

Skin Effects: Practically non-toxic if absorbed. Other similar highly refined products have not shown skin tumors in mouse skin painting studies.

Skin Irritation: May cause mild irritation with prolonged and repeated exposure.

Skin Sensitization: Skin sensitization is indicated as non-sensitizing based on data from similar products.

Carcinogenicity

Skin: Not considered a potential carcinogen based on IP346 DMSO of less than 3.0 wt%

Genotoxicity: This product is considered non-mutagenic and has negative potential for tumor development based on results from Modified Amex Assay, with Mutagenic Index of less than 1.0.

This product is severely hydrotreated at greater than 800 psi and does not require a cancer warning under OSHA Hazard Communication Standard (29 CFR 1910.1200). Similar products have not been listed in NTP reports, and are classified by IARC as having inadequate evidence of carcinogenicity. IARC indicates that based on preponderance of data highly refined mineral oils are not mutagenic either in vitro or in vivo. Severely hydrotreated naphthenic petroleum oils have not been found to be carcinogenic or potential carcinogens.

SECTION 12 – ECOLOGICAL INFORMATION

Aquatic Release: Advise authorities if product has entered or may enter watercourses or sewer drains.

Ecotoxicity: Available data indicate this product is not acutely toxic. 96 hr. acute state toxicity for Pimephales promelas (Fathead Minnow) LC50 mortality is greater than 30,000 mg/L. Other similar products have shown 48 hr EL0 for Daphnia magna greater than 1000 mg/L, N 96 hr IrL50 for Scenedesmus subspicatus (Alga) greater than 1000 mg/L.

Biodegradability : This product reaches less than 10% biodegradation in standard 28 day test and is not readily biodegradable in the environment.

SECTION 13 – DISPOSAL CONSIDERATONS

Follow Federal, State, and Local regulations. Not a RCRA hazardous waste if uncontaminated. If “used”, RCRA criteria must be determined. Do not flush down drain/storm sewer. Contract to authorize disposal service. If permitted incineration may be practical. Consider recycling.

SECTION 14 – TRANSPORT INFORMATION

Proper Shipping Name: Not regulated by DOT (Contains Oil)

Hazard Class: Not applicable

DOT ID No.: Not applicable

DOT Shipping Label: Not regulated by DOT

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SECTION 15 – REGULATORY INFORMATION

U.S. Federal Regulatory Information:

CERCLA/SARA

302/303/304 Categories: (40 CFR 355 Appendix A)	Extremely Hazardous Substances	No
311/312 Categories: (40 CFR 370)	Immediate (Acute) Health Effects	No
	Delayed (Chronic) Health Effects	No
	Fire Hazard	No
	Sudden Release of Pressure Hazard	No
	Reactivity Hazard	No
313 Categories	Toxic Chemicals (40 CFR 372)	No
Clean Air Act:	Hazardous Air Pollutants (HAPS)	None
	Ozone Depleting Compounds (ODC)	None
Clean Water Act: (40 CFR 116;401.15)	If spilled into navigable waters it is reportable to National Response Center, 800-424-8802	
OSHA (29 CFR 1910):	Reportable Quantity = Oil Sheen present on navigable water surface.	
RCRA (40 CFR 261.33):	This product is not hazardous under Hazard Communication Standard 29 CFR 1910.1200.	
	This product does not meet hazardous waste criteria.	

EPA/TSCA Inventory: The components of this product are listed on the EPA/TSCA inventory of chemicals. CAS No. 64741-52-5

State Regulations:

California Prop 65	No Proposition 65 chemicals exist in this product, not labeling required.
Florida	No listed ingredients are present.
Massachusetts RTK	No listed ingredients are present.
Minnesota RTK	No listed ingredients are present.
New Jersey	Lists petroleum oil, but this product does not contain hazardous ingredients.
Pennsylvania RTK	Lists petroleum oil, but this product does not contain hazardous ingredients greater than 3%
Illinois DOL TSL	No listed ingredients are present

Other Regulations:

WHMIS (Canada)	Not listed on the Canadian Controlled Product Ingredient Disclosure and is compliant with Controlled Products Regulation.	
CONEG Metals:	Since cadmium, chromium, lead and mercury are not detectable, and it does not exceed 100 ppm total in this product, it is compliant with CONEG Metals regulation.	
EEC (Europe):	This product is not known to be a dangerous good internationally, unlabeled.	
	No known R-Phrases or S-Phrases	
	Hazard Label	None
	Danger Symbol	None

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Foreign Inventories:

The components of this product are listed under the following foreign inventories:

European Union's ENICS No. 265-156-6
Korea's ECL No. KE-12552
Australia's AICS No. 6472-52-5
Canda's DSL No. 64742-52-5
Philippine's PICCS – on list

SECTION 16 – OTHER INFORMATION

Abbreviations:

ACGIH (American Conference of Governmental Industrial Hygienists); ANSI (America National Standards Institute); CAS (Chemical Abstract Service); CERCLA (Comprehensive Environmental Response, Compensation, & Liability Act); CFR (Code of Federal Regulations); CHIP (Chemical Hazard Information & Packaging for Supply); CONCAWE (European Organization for Environment, Health & Safety); CPR (Controlled Product Regulations); DOL (Department of Labor); EEC (European Economic Community Directives); EINECS (European Inventory of Existing Commercial Chemical Substances); EL50 (Effective Loading rate required for immobilize 50% invertebrate species); ELINCS (European List of New Chemical Substances); EPA (Environmental Protection Agency); EPCRA (Emergency Planning & Community Right-to-Know Act of 1986); EU (European Union); FDA (Food and Drug Administration Act-USA); GHS (Global Harmonization System); HCS (Hazard Communication Standard); IARC (International Agency for Research on Cancer); ILO (International Labor Organization); LC50 (Lethal Concentration 50% test organisms); LD50 (Lethal Dose 50% test organisms); LVP-VOC (Low Vapor Pressure Volatile Organic Compound); SDS (Material Safety Data Sheet); MSHA (Mine Safety & Health Administration); NIOSH (National Institute of Occupational Safety & Health); NTP (National Toxicology Program); OSHA (Occupational Safety & Health Administration); PEL (Permissible Exposure Limit); Prop 65 (California Proposition 65); PMcc (Pensky-Martin Closed Cup); RCRA (Resource Conservation and Recovery Act); RTK (Right-to-Know); R-Phrase (EU Risk Phrases); S-Phrase (EU Safety Phrase); SARA (Superfund Amendments & Reauthorization Act); TSCA (Toxic Substances Control Act); TSL (Toxic Substance List); TLV (Threshold Limit Value); WHMIS (Workplace Hazardous Materials Information System-Canada); IrL (Inhibitory Loading rate required to reduce algal growth rate by 50%); IbL50 (Inhibitory loading rate required to reduce area under growth curve or biomass by 50%); ppm (parts per million); mg/m3 (milligram per cubic meter); N(No); Y(yes)

NFPA Hazard Rating

-Health	1 Slight
-Fire	1 Slight
-Reactivity	0 Least

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