

Signature® Star 12 Safety Data Sheet



SECTION 1 IDENTIFICATION

Product Name: Signature® Star 12

Distributor Information:

Parman Energy Corporation
7101 Cockrill Bend Blvd
Nashville, TN 37209
(800) 727-7920

Product Use: Base Oil

Emergency Phone Number:

PERS (800) 633-8253

SECTION 2 HAZARD(S) IDENTIFICATION

Chemical Identity	CAS No.	Concentration
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	100.00%

The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Appearance and Odour: Clear. Liquid at room temperature. Slight hydrocarbon

Health Hazards: Not classified as dangerous for supply or conveyance

Safety Hazards: Not classified as flammable but will burn

Environmental Hazards: Not classified as dangerous for the environment

Health Hazards: Not expected to be a health hazard when used under normal conditions

Health Hazards:

Inhalation: Under normal conditions of use, this is not expected to be a primary route of exposure

Skin Contact: Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis

Eye Contact: May cause slight irritation to eyes

Ingestion: Low toxicity if swallowed

Other Information: Used oil may contain harmful impurities

Signs and Symptoms: Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhea

Aggravated Medical Conditions: Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: skin

Environmental Hazards: Not classified as dangerous for the environment

Additional Information: Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200

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SECTION 4 FIRST-AID MEASURES

First-aid measures general: Not expected to be a health hazard when used under normal conditions.

Inhalation: No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.

Skin: Remove contaminated shoes and clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.

Eye Contact: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

Ingestion: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Notes to Physician: Treat symptomatically

SECTION 5 FIRE-FIGHTING MEASURES

Clear fire area of all non-emergency personnel

Flash point: Typical 269° C / 516° F (Cleveland Open Cup)

Upper/Lower: Typical 1 – 10 % (V) (based on mineral oil)

Flammability or Explosion Limits:

Auto Ignition Temperature: > 280 ° C / 536° F

Specific Hazards: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Extinguishing Media

Suitable: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media: Do not use water in a jet.

Protection for Fire Fighters:

Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

Protective Measures: Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Clean Up Methods: Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly.

Additional Advice: Local authorities should be advised if significant spillages cannot be contained.

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Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required

SECTION 7 HANDLING AND STORAGE

Precautionary Measures:

General Precautions: Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a RISK assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material

Advice on Safe Handling: Avoid prolonged or repeated contact with skin. Avoid inhaling vapor and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used

Conditions for safe storage, including any incompatibilities:

Storage Conditions: Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closeable containers. Store at ambient temperature.

Recommended Materials: For containers or container linings, use mild steel or high density polyethylene.

Incompatible Products: PVC

Additional Information: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Material	Source	Type	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA (Inhalable fraction)		5 mg/m3	
Oil mist, mineral	OSHA Z1	PEL (Mist.)		5 mg/m3	
Oil mist, mineral	OSHA Z1A	TWA (Mist.)		5 mg/m3	
Oil mist, mineral	OSHA Z1	(Mist.)			Listed

Biological Exposure Index (BEI): No biological limit allocated

Exposure Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Personal Protective Equipment: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Eye/Face Protection: Wear safety glasses or full face shield if splashes are likely to occur.

Hand Protection: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US:F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

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Respiratory Protection: No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors [boiling point >65° C (149° F)]

Protective Clothing: Skin protection not ordinarily required beyond standard issue work clothes.

Monitoring Methods: Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Environmental Exposure Controls: Minimize release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation. Consult local authorities for appropriate values

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Clear

Physical State: Liquid at room temperature

Odor: Slight hydrocarbon

pH: Not available

Vapor Pressure: <0.5 Pa at 20°C / 68°F (estimated value(s))

Vapor Density (Air =1): > 1 (estimated value(s))

Density: Typical 870 kg/m³ at 15°C / 59°F

Initial Boiling Point and Boiling Range: >176.67 °C / 350.01 °F estimated value(s)

Pour Point: Typical - 13°C / 9°F

Flash Point: Typical 269 °C / 516°F

Upper/Lower Flammability or Explosion Limits: Typical 1 -10% (V) (based on mineral oil)

Water Solubility: Negligible

Specific Gravity: ca. 0.8751 at 15°C / 59°F

Kinematic Viscosity: Typical 107 – 120 cSt @ 40°C / 104°F

Evaporation Rate (nBuAc=1): No data available

Octanol/Water Partition Coefficient: >6 (based on information on similar products)

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Extremes of temperature and direct sunlight.

Materials to Avoid: Strong Oxidizing Agents

Hazardous Decomposition Products: Hazardous decomposition products are not expected to form during normal storage.

SECTION 11 TOXICOLOGICAL INFORMATION

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Basis for Assessment: Information given is based on data on the components and the toxicology of similar products.

Acute Oral Toxicity: Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat

Acute Dermal Toxicity: Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit

Acute Inhalation Toxicity: Not considered to be an inhalation hazard under normal conditions of use

Eye Contact: Expected to be slightly irritating

Skin Contact: Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis

Respiratory Irritation: Inhalation of vapors or mists may cause irritation

Sensitisation: Not expected to be a skin sensitizer

Repeated Dose Toxicity: Not expected to be a hazard

Mutagenicity: Not considered a mutagenic hazard

Carcinogenicity: Product contains mineral oils of types shown to be noncarcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC)

Reproductive & Developmental Toxicity:

Additional Information: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity: Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract. Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

Mobility: Liquid under most environmental conditions. Floats on water. If it enters soil, it will absorb to soil particles and will not be mobile.

Persistence and Degradability: Expected to be not readily biodegradable. Expected to be inherently biodegradable.

Bioaccumulation: Has the potential to bioaccumulate

Other adverse effects: Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal Method: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.

Container Disposal: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

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Local Legislation: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14 TRANSPORT INFORMATION

US Department of Transportation Classification (49CFR): This material is not subject to DOT regulations under 49 CFR Parts 171-180

IMDG: This material is not classified as dangerous under IMDG regulations

IATA: This material is either not classified as dangerous under IATA regulations or needs to follow country specific requirements.

SECTION 15 REGULATORY INFORMATION

This regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status:

Notification Status:

TSCA: All components listed.

DSL/NDSL: All components listed.

EINECS/ELINCS: All components listed or polymer exempt.

CHINA INV: All components listed.

NZIOC: All components listed.

KECI (KR): All components listed.

PICCS (PH): All components listed.

AICS: All components listed.

Legend:

TSCA – United States Toxic Substances Control Act Section 8 (b) Inventory

DSL/NDSL – Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS – European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS – Japan Existing and New Chemical Substances

IECSC – China Inventory of Existing Chemical Substances

KECL – Korean Existing and Evaluated Chemical Substances

PICCS – Philippines Inventory of Chemicals and Chemical Substances

AICS – Australian Inventory of Chemical Substances

Motiva classifies this material as an “oil” under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA

Under Section 311 of the Clean Water Act (CWA) this material is considered an oil. As such, spills into surface waters must be reported to the National Response Center at (800) 424-8802

SARA 311/312 CATEGORIES

1. Acute Health Hazard: No
2. Chronic Health Hazard: No
3. Fire Hazard: No
4. Sudden Release of Pressure Hazard: No
5. Reactivity Hazard: No

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This material does not contain any chemicals known to the

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State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 OTHER INFORMATION

NFPA Ratings		HMIS Rating	
NFPA Health Hazard	0	HMIS Health Hazard	0
NFPA Fire Hazard	1	HMIS Fire Hazard	1
NFPA Reactivity	0	HMIS Reactivity	0

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SDS sections updated 1, 3

The information provided on this SDS is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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20 September 2012