

SAFETY DATA SHEET

SUNSPRAY MLO

000003010053



Version 5.3

Revision Date 2023/03/29

Print Date 2023/03/29

SECTION 1. IDENTIFICATION

Product name : SUNSPRAY MLO

Synonyms : Product code: 102402

Manufacturer or supplier's details

HF Sinclair Refining and Marketing LLC
1700 South Union Avenue
Tulsa OK 74107
United States
Telephone : Customer Service: (800) 456-4786

Emergency telephone number

Emergency telephone number : CHEMTREC: 1-800-424-9300; CCN: 999116
Poison Control Centre: Consult local telephone directory for emergency number(s).

Recommended use of the chemical and restrictions on use

Recommended use : Pesticidal spray oil (only to be used as indicated on the label)

Prepared by : Product Safety

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : May be fatal if swallowed and enters airways.

Precautionary statements : **Response:**
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
Do NOT induce vomiting.

Storage:
Store locked up.

Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

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IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil — unspecified	64742-56-9	98 - 100
Dodecan-1-ol, ethoxylated	9002-92-0	0 - 2

Actual concentration is withheld as a trade secret,

EPA Registration Number: 86330-11

"Active Ingredient: Mineral Oil" stated on label required by USEPA-FIFRA in Revised Registration Eligibility Decision (RED) for Aliphatic Solvents. The specific CAS # and ingredient names listed above are the mineral oil(s) in this product. Other ingredient: Emulsifier stated on label is a non-ionic emulsifier - ethoxylated fatty alcohol. The special CAS # and ingredient name are listed above in this product.

SECTION 4. FIRST AID MEASURES

If inhaled	: Move to fresh air. Artificial respiration and/or oxygen may be necessary. Seek medical advice.
In case of skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice.
In case of eye contact	: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	: Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center.

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Never give anything by mouth to an unconscious person.
Seek medical advice.

Most important symptoms and effects, both acute and delayed : First aider needs to protect himself.

Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : Do NOT use water jet.

Specific hazards during fire-fighting : Cool closed containers exposed to fire with water spray.

Hazardous combustion products : Carbon oxides (CO, CO₂), smoke and irritating vapours as products of incomplete combustion.

Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Material can create slippery conditions.
Mark the contaminated area with signs and prevent access to unauthorized personnel.
Only qualified personnel equipped with suitable protective equipment may intervene.

Environmental precautions : Do not allow uncontrolled discharge of product into the environment.

Methods and materials for containment and cleaning up : Prevent further leakage or spillage if safe to do so.
Remove all sources of ignition.
Soak up with inert absorbent material.
Non-sparking tools should be used.
Ensure adequate ventilation.
Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : None known.

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- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Use only with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid contact with skin, eyes and clothing.
Do not ingest.
Keep away from heat and sources of ignition.
Keep container closed when not in use.
Do not handle at temperatures >40°C, unless wearing appropriate protective equipment.
- Conditions for safe storage : Store in original container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep in a dry, cool and well-ventilated place.
Keep in properly labelled containers.
To maintain product quality, do not store in heat or direct sunlight.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil — unspecified	64742-56-9	TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH
		TWA (Mist)	5 mg/m ³	OSHA Z-1
		TWA (Mist)	5 mg/m ³	OSHA P0
		TWA (Mist)	5 mg/m ³	NIOSH REL
		ST (Mist)	10 mg/m ³	NIOSH REL

- Engineering measures : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

- Filter type : organic vapour filter

- Hand protection
Material : neoprene, nitrile, polyvinyl alcohol (PVA), Viton®.

- Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is nec-

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	essary.
Eye protection	: Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	: Wash contaminated clothing before re-use.
Hygiene measures	: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: colourless
Odour	: slight
Odour Threshold	: No data available
pH	: Not applicable
Pour point	: -15 °C (5 °F)
Boiling point/boiling range	: 264 - 436 °C (507 - 817 °F)
Flash point	: 172 °C (342 °F) Method: Cleveland open cup
Fire Point	: No data available
Evaporation rate	: No data available
Flammability	: Remarks: No data available
Auto-Ignition Temperature	: 649 °F / 343 °C
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: < 0.00011 kPa (68 °F / 20 °C)
Relative vapour density	: No data available
Relative density	: 0.85 (61 °F / 16 °C)

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Density	:	No data available
Solubility(ies)	:	
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	log Pow: 2 - 6
Viscosity	:	
Viscosity, kinematic	:	10.8 cSt (104 °F / 40 °C)
Explosive properties	:	Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Molecular weight	:	311 g/mol

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	:	Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Reactive with oxidising agents.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition products may include the following materials: carbon dioxide, carbon monoxide, and other asphyxiants.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Ingestion
Inhalation
Skin contact

Acute toxicity

Product:

Acute oral toxicity	:	Remarks: No data available
Acute inhalation toxicity	:	Assessment: The substance or mixture has no acute inhalation toxicity Remarks: No data available
Acute dermal toxicity	:	Remarks: No data available

Components:

Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil — unspecified:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg,
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Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

Dodecan-1-ol, ethoxylated:

Acute oral toxicity : LD50 (Rat): 1,000 mg/kg,

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg,

Skin corrosion/irritation

Product:

Remarks : Non-irritating to the skin. Heated material can cause thermal burns.

Serious eye damage/eye irritation

Product:

Remarks : Non-irritating to the eyes. Heated material can cause thermal burns.

Respiratory or skin sensitisation

Product:

Exposure routes: Skin contact
Species: Guinea pig
Result: Not a skin sensitizer.
Remarks: No evidence of skin sensitization.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: Not considered to be a germ cell mutagen.

Carcinogenicity

Product:

Remarks : The mineral oils in the product contain < 3% DMSO extract (IP 346). Not considered to be carcinogenic.

Reproductive toxicity

Product:

Effects on fertility : Remarks: Not considered to be toxic to the reproductive system.

Effects on foetal development : Remarks: Not considered to be teratogenic.

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STOT - single exposure

Product:

Remarks : No data available

Components:

Dodecan-1-ol, ethoxylated:

Target Organs : respiratory tract irritation
Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
:

STOT - repeated exposure

Product:

Remarks : No data available

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Components:

Distillates (petroleum), solvent-dewaxed light paraffinic; Baseoil — unspecified :

Toxicity to fish : LC50 (Fish): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): > 100 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic : EC50 (algae): > 100 mg/l

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plants

Exposure time: 72 h

Dodecan-1-ol, ethoxylated :

Toxicity to fish : LC50 (Fish): 1.5 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : LC50 (Daphnia magna (Water flea)): 6.46 mg/l
aquatic invertebrates Exposure time: 48 h

Persistence and degradability

Product:

Biodegradability : Result: Inherently biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : This product has no known ecotoxicological effects.
Consult product label for additional information.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Offer surplus and non-recyclable solutions to a licensed disposal company.
Waste must be classified and labelled prior to recycling or disposal.
Send to a licensed waste management company.
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

Contaminated packaging : Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

National Regulations

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49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Aspiration hazard
Hazard not otherwise classified (health hazards)
Defatting irritant

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act

Not applicable

US State Regulations

Massachusetts Right To Know

Distillates (petroleum), solvent-dewaxed light paraffinic; 64742-56-9
Baseoil — unspecified:

Pennsylvania Right To Know

Distillates (petroleum), solvent-dewaxed light paraffinic; 64742-56-9
Baseoil — unspecified

New Jersey Right To Know

Distillates (petroleum), solvent-dewaxed light paraffinic; 64742-56-9
Baseoil — unspecified

New York City Hazardous Substances

Distillates (petroleum), solvent-dewaxed light paraffinic; 64742-56-9
Baseoil — unspecified

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

TSCA : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

AICC : On the inventory, or in compliance with the inventory

DSL : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

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- KECI : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory
- NZIoC : On the inventory, or in compliance with the inventory
- EINECS : On the inventory, or in compliance with the inventory
- TCSI : On the inventory, or in compliance with the inventory

: **Labeling requirements under FIFRA**

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION

Keep out of reach of children

Harmful if absorbed through skin, swallowed or inhaled.

Avoid contact with eyes, skin or clothing.

Avoid breathing spray mist.

Remove and wash contaminated clothing before use.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Contains Petroleum Distillates: Vomiting may cause aspiration pneumonia. Aspiration may occur after swallowing or vomiting and results in serious and sometimes delayed lung injury.

This product is toxic to aquatic invertebrates.

SECTION 16. OTHER INFORMATION

Further information

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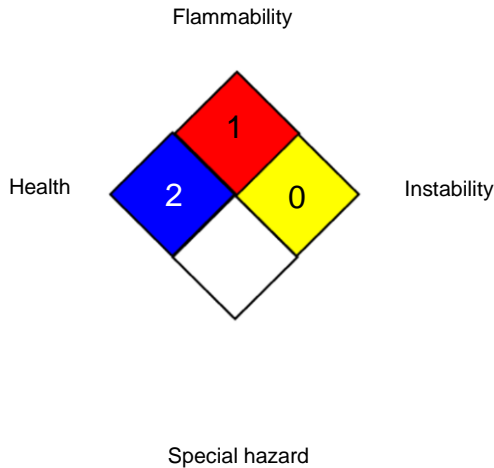


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NFPA 704:



HMIS® IV:

HEALTH		3
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

- ACGIH : USA. ACGIH Threshold Limit Values (TLV)
- NIOSH REL : USA. NIOSH Recommended Exposure Limits
- OSHA P0 : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)
- OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
- ACGIH / TWA : 8-hour, time-weighted average
- NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
- NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
- OSHA P0 / TWA : 8-hour time weighted average
- OSHA Z-1 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New

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Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Prepared by : Product Safety

Revision Date : 2023/03/29

Date format : yyyy/mm/dd

The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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