

FLUIDMATIC MV LV

SDS # : 082233

Section 1. Identification

GHS product identifier : FLUIDMATIC MV LV

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Transmission fluids
Formulation additives, lubricants and greases - Industrial
General use of lubricants and greases in vehicles or machinery - Industrial

Supplier's details : TotalEnergies Marketing USA, Inc.
1201 Louisiana St. Suite 1800
Houston, TX 77002
Phone: 713-483-5000
ProductSafety@totalenergies.com

Emergency telephone number (with hours of operation) :

1-866-928-0789 (For Emergencies, call CARECHEM 24/7 Domestic)
1-215-207-0061 (For Emergencies, call CARECHEM 24/7 International)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : May cause an allergic skin reaction.

Precautionary statements

Prevention : Wear protective gloves. Avoid breathing vapor.

Response : Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥75 - ≤90	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	≥25 - ≤50	64742-55-8
Distillates (petroleum), hydrotreated light paraffinic	≤3	64742-55-8
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	64742-56-9
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	≤3	72623-86-0
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	≤3	72623-87-1
Reaction products of fatty acids, C14-C18 (branched and linear) and C18 (unsaturated) with tetraethylenepentamine (linear, branched, cyclic)	≤3	-
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	≤0.3	93882-40-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Additional information : Mineral oil of petroleum origin Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.
Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : carbon monoxide
carbon dioxide
nitrogen oxides
phosphorus oxides



- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
<input checked="" type="checkbox"/> Distillates (petroleum), hydrotreated heavy paraffinic	<p>ACGIH TLV (United States, 1/2021). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</p> <p>NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p> <p>OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.</p>
Distillates (petroleum), hydrotreated light paraffinic	<p>ACGIH TLV (United States, 1/2021). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</p> <p>NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p> <p>OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.</p>
Distillates (petroleum), hydrotreated light paraffinic	<p>ACGIH TLV (United States, 1/2021). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</p> <p>NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p> <p>OSHA PEL (United States, 5/2018). [Oil mist, mineral] TWA: 5 mg/m³ 8 hours.</p>
Distillates (petroleum), solvent-dewaxed light paraffinic	<p>ACGIH TLV (United States, 1/2021). [Mineral Oil, pure, highly and severely refined] TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction</p> <p>NIOSH REL (United States, 10/2020). [OIL MIST MINERAL] TWA: 5 mg/m³ 10 hours. Form: Mist</p>

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	TWA: 5 mg/m ³ 8 hours. ACGIH TLV (United States, 1/2021). [Mineral Oil, pure, highly and severely refined]
Reaction products of fatty acids, C14-C18 (branched and linear) and C18 (unsaturated) with tetraethylenepentamine (linear, branched, cyclic) 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). [OIL MIST MINERAL]
	TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). [Oil mist, mineral]
	TWA: 5 mg/m ³ 8 hours. NIOSH REL (United States, 10/2020). [OIL MIST MINERAL]
	TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist None.
	None.

Advisory OEL : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : 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 necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Hydrocarbon-proof gloves
 Fluorinated rubber
 nitrile rubber
 Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces In case of insufficient ventilation, wear suitable respiratory equipment. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

Appearance

- Physical state** : Liquid. [limpid]
- Color** : Red.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not applicable.
- Pour point** : -45°C (-49°F)
- Boiling point** : 316°C (>600.8°F)
- Flash point** : Open cup: 208°C (406.4°F) [ASTM D 92]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Lower: 0.9%
Upper: 7%
- Vapor pressure** : 0.013 kPa (0.1 mm Hg) [room temperature]
Not applicable. [50°C]
- Vapor density** : 2 [Air = 1]
- Relative density** : 0.835 [ISO EN 3675]
- Density** : 0.835 g/cm³ [15°C] [ISO EN 3675]
- Solubility(ies)** :

Media	Result
<input checked="" type="checkbox"/> Water	Not soluble

- Miscible with water** : No.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : 208°C (>406.4°F)
- Decomposition temperature** : Not applicable.

- Viscosity** : Kinematic (40°C (104°F)): 28 mm²/s (28 cSt) [ISO 3104]
- Flow time (ISO 2431)** : Not available.
- Particle characteristics**
- Median particle size** : Not applicable.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Incompatible materials** : Strong oxidizing agents
- Hazardous decomposition products** : carbon monoxide
carbon dioxide
nitrogen oxides
phosphorus oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
<input checked="" type="checkbox"/> Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat - Male, Female	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-	Read across OECD 402
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	Read across OECD 401
Distillates (petroleum), hydrotreated light paraffinic	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	Read across OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Distillates (petroleum), hydrotreated light paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 420
Distillates (petroleum), solvent-dewaxed light paraffinic	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	LC50 Inhalation Dusts and mists	Rat	5.53 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
Lubricating oils (petroleum),	LC50 Inhalation Dusts	Rat	5.1 mg/l	4 hours	OECD 403



C20-50, hydrotreated neutral oil-based	and mists				
	LD50 Dermal	Rabbit - Male, Female	>5000 mg/kg	-	OECD 402 Read across
Reaction products of fatty acids, C14-C18 (branched and linear) and C18 (unsaturated) with tetraethylenepentamine (linear, branched, cyclic)	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	OECD 401 Read across
	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LC50 Inhalation Vapor	Rat	80.4 mg/l	1 hours	-
	LC50 Inhalation Vapor	Rat	20.1 mg/l	4 hours	-
	LD50 Dermal	Rabbit	>2000 mg/kg	-	OECD 402
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401
	LD50 Dermal	Rabbit	>3160 mg/kg	-	OECD 402 Acute Dermal Toxicity
	LD50 Oral	Rat - Male	>10000 mg/kg	-	OECD 401 Acute Oral Toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	Eyes - Cornea opacity	Rabbit	1	-	OECD 405 Acute Eye Irritation/ Corrosion
	Eyes - Edema of the conjunctivae	Rabbit	2	-	OECD 405 Acute Eye Irritation/ Corrosion
	Eyes - Iris lesion	Rabbit	1	-	OECD 405 Acute Eye Irritation/ Corrosion

Skin : Based on available data, the classification criteria are not met.

Eyes : Based on available data, the classification criteria are not met.

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

Product/substance	Route of exposure	Species	Result
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	skin	Guinea pig	Sensitizing

Skin : Based on available data, the classification criteria are met.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity



Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Conclusion/Summary : Based on available data, the classification criteria are not met.

Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	ASPIRATION HAZARD - Category 1

Conclusion/Summary : Based on available data, the classification criteria are not met.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<input checked="" type="checkbox"/> Distillates (petroleum), hydrotreated light paraffinic	N/A	N/A	N/A	N/A	5.1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	N/A	N/A	N/A	N/A	5.53
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	N/A	N/A	N/A	N/A	5.1
Reaction products of fatty acids, C14-C18 (branched and linear) and C18 (unsaturated) with tetraethylenepentamine (linear, branched, cyclic)	N/A	N/A	N/A	20.1	5.1
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	N/A	2500	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/substance	Result	Species	Exposure	Test
<input checked="" type="checkbox"/> Distillates (petroleum), hydrotreated heavy paraffinic	Acute EC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Acute EC50 >10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Chronic NOEL >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
Distillates (petroleum), hydrotreated light paraffinic	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	-
	Acute EC50 >100 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Chronic NOELR 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
Distillates (petroleum), hydrotreated light paraffinic	Chronic NOELR >1000 mg/l	Fish - Oncorhynchus mykiss	21 days	-
	Acute EC50 >100 mg/l	Algae - Pseudokirchnerella subcapitata	48 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Chronic NOEL 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
Distillates (petroleum), solvent-dewaxed light paraffinic	Chronic NOEL >1000 mg/l	Fish - Oncorhynchus mykiss	21 days	-
	Acute EL50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
	Acute EL50 10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute EL50 ≥100 mg/l	Fish - Pimephales promelas	96 hours	OECD 203
	Chronic NOEL >100 mg/l	Algae - Pseudokirchneriella	72 hours	OECD 201



TotalEnergies

FLUIDMATIC MV LV

SDS # : 082233

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	Chronic NOEL >1000 mg/l	subcapitata Crustaceans - Daphnia magna	21 days	OECD 211
	Acute EL50 >100 mg/l	Algae - Pseudokircheriella subcapitata	72 hours	OECD 201
	Acute EL50 >10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute LL50 >1000 mg/l	Fish - Pimephales promelas	96 hours	OECD 203
	Chronic NOEL >100 mg/l	Algae - Pseudokircheriella subcapitata	72 hours	OECD 201
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	OECD 211
	Acute EL50 >100 mg/l	Algae - Pseudokirchneriella subcapitata	48 hours	OECD 201
	Acute EL50 >10000 mg/l	Crustaceans - Daphnia magna	48 hours	OECD 202
	Acute LL50 >100 mg/l	Fish - Pimephales promelas	96 hours	OECD 203
	Chronic NOEL >100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours	OECD 201
Reaction products of fatty acids, C14-C18 (branched and linear) and C18 (unsaturated) with tetraethylenepentamine (linear, branched, cyclic)	Chronic NOEL >1000 mg/l	Crustaceans - Daphnia magna	21 days	OECD 211
	Acute EC50 44 mg/l	Algae - Pseudokirchnerella subcapitata	96 hours	OECD 201
	Acute EC50 94 mg/l	Algae - Pseudokirchnerella subcapitata	96 hours	OECD 201
	Acute EC50 1000 mg/l	Micro-organism	3 hours	-
	Acute LC50 1000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Acute LC50 1000 mg/l	Fish	96 hours	-
	Acute NOEC 23 mg/l	Algae - Pseudokirchnerella subcapitata	96 hours	OECD 201
Chronic NOEC 32 mg/l	Daphnia - Daphnia magna	21 days	OECD 202	

Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
Distillates (petroleum), hydrotreated heavy paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Distillates (petroleum), solvent-dewaxed light paraffinic	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	OECD 301F	31 % - Not readily - 28 days	-	Activated sludge

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	Not readily
Distillates (petroleum), solvent-dewaxed light paraffinic	-	-	Not readily
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	-	-	Not readily
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	-	-	Not readily
Reaction products of fatty acids, C14-C18 (branched and linear) and C18 (unsaturated) with tetraethylenepentamine (linear, branched, cyclic)	-	-	Not readily

Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
Distillates (petroleum), hydrotreated heavy paraffinic	>4	-	high
Distillates (petroleum), solvent-dewaxed light paraffinic	3.1	-	low
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	6.1	-	high

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility in soil : Given its physical and chemical characteristics, the product generally shows low soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	ICAO/IATA
UN/ID No	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 4(a) proposed test rules**: methyl-1H-benzotriazole
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined
 Clean Water Act (CWA) 311: Reaction mass of ethylbenzene and xylene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : SKIN SENSITIZATION - Category 1

Composition/information on ingredients



Name	%	Classification
Distillates (petroleum), hydrotreated heavy paraffinic	≥75 - ≤90	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	≥25 - ≤50	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	≤3	ASPIRATION HAZARD - Category 1
Distillates (petroleum), solvent-dewaxed light paraffinic	≤3	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	≤3	ASPIRATION HAZARD - Category 1
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	≤3	ASPIRATION HAZARD - Category 1
Reaction products of fatty acids, C14-C18 (branched and linear) and C18 (unsaturated) with tetraethylenepentamine (linear, branched, cyclic)	≤3	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate	≤0.3	EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1

State regulations

Massachusetts

: The following components are listed: OIL MIST, MINERAL; OIL MIST, MINERAL; MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC; MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC; MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED LIGHT PARAFFINIC; OIL MIST, MINERAL; OIL MIST, MINERAL

New York

: None of the components are listed.

New Jersey

: The following components are listed: MINERAL OIL (UNTREATED and MILDLY TREATED)

Pennsylvania

: None of the components are listed.

California Prop. 65

To the best of our knowledge, this product does not contain any substances known to the State of California to cause cancer, developmental and/or reproductive harm

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia inventory (AIC)

: All components are listed or exempted.

Canada inventory (DSL/NDSL)

: All components are listed or exempted.

China inventory (IECSC)	: All components are listed or exempted.
Europe inventory (EC)	: All components are listed or exempted.
Japan inventory	: Japan inventory (CSCL) : All components are listed or exempted. Japan inventory (ISHL) : Not determined.
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
Philippines inventory (PICCS)	: All components are listed or exempted.
Korea inventory (KECI)	: Not determined.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed or exempted.
Thailand inventory	: Not determined.
Turkey inventory	: Not determined.
United States inventory (TSCA 8b)	: All components are listed or exempted.
Vietnam inventory	: Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	2
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification



TotalEnergies

FLUIDMATIC MV LV

SDS # : 082233

Classification	Justification
SKIN SENSITIZATION - Category 1	Calculation method

History

Date of revision : 2022/09/16

Date of previous revision : 2021/08/09

Version : 1.01

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- : BCF = Bioconcentration Factor
- : GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- : IATA = International Air Transport Association
- : IBC = Intermediate Bulk Container
- : IMDG = International Maritime Dangerous Goods
- : LogPow = logarithm of the octanol/water partition coefficient
- : MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- : N/A = Not available
- : SGG = Segregation Group
- : UN = United Nations

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes 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 that exist.