

SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

RUBIA GAS 9M FE 15W-40

SDS # : 089619

Section 1. Identification

GHS product identifier

: RUBIA GAS 9M FE 15W-40

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

| Identified uses | |
|--|---|
| Engine oil | |
| 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. Hazar | |
| | |
| 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 | : No signal word. |
|-------------------------------------|---|
| Hazard statements | : May cause an allergic skin reaction. |
| Precautionary statements | |
| Prevention | : 📈ear 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. |
| Supplemental label elements | : Avoid contact with skin and clothing. Wash thoroughly after handling. |
| Hazards not otherwise classified | : Prolonged or repeated contact may dry skin and cause irritation. |



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Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

| Ingredient name | % (w/w) | CAS number |
|--|---------|------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | ≤10 | 64742-65-0 |
| Distillates (petroleum), hydrotreated heavy paraffinic | ≤3 | 64742-54-7 |
| Distillates (petroleum), hydrotreated light paraffinic | ≤3 | 64742-55-8 |
| Molybdenum polysulphide long chain alkyl dithiocarbamate complex | ≤0.3 | - |

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 | : | mediately 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. |
|--------------|---|--|
| 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 irrit reaction. | tation. May cau | se an allergi | c skin |
| Ingestion | : | No known significant effects or critical hazards. | | | |
| Date of revision | : 2022/05/11 | 2 | USA | ENGLISH | 2/14 |



| Over-exposure s | igns/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 med | dical 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, CO ₂ , 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 Mercaptans Hydrogen sulfide phosphorus oxides sulfur oxides Zinc oxides nitrogen 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, pro | otective 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. |



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| 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 co | nta | ainment 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

<u>Control parameters</u> <u>Occupational exposure limits</u>



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| Distillates (petroleum), solvent-dewaxed heavy paraffinic ACGIH TLV (United States, 1/2021), TWA: 5 mg/m ² 8 hours, Form: Inhalable fraction Distillates (petroleum), hydrotreated heavy paraffinic NIOSH REL (United States, 10/2020). TWA: 5 mg/m ² 10 hours, Form: Mist STEL: 10 mg/m ² 15 miutes, Form: Inhalable fraction Distillates (petroleum), hydrotreated light paraffinic ACGIH TLV (United States, 1/2021). TWA: 5 mg/m ² 8 hours. Distillates (petroleum), hydrotreated light paraffinic NIOSH REL (United States, 1/2021). TWA: 5 mg/m ² 8 hours. Form: Inhalable fraction Distillates (petroleum), hydrotreated light paraffinic NIOSH REL (United States, 1/2021). TWA: 5 mg/m ² 8 hours. Form: Mist STEL: 10 mg/m ² 15 miutes. Form: Mist STEL: 10 mg/m ² 16 hours. Form: Mist STEL: 10 mg/m ² 10 hours. Form: Mist S | Ingredient name | | Exposure limits |
|---|-------------------------------|--|---|
| TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 5/2018). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 5/2018). TWW: 5 mg/m³ 8 hours. Form: Inhalable fraction Niose Advisory OEL Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, N | Distillates (petroleum), solv | vent-dewaxed heavy paraffinic | TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). |
| TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction Molybdenum polysulphide long chain alkyl dithiocarbamate complex More. Advisory OEL : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, S' 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3 (highly refined) ppropriate engineering ontrols : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. : 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 equipmen will be necessary to reduce emissions to acceptable levels. Idividual protection 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 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, unles the asseessment indicates a higher degree of prot | Distillates (petroleum), hyd | rotreated heavy paraffinic | TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). |
| Advisory OEL Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, Si 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3 (highly refined) appropriate engineering ontrols Good general ventilation should be sufficient to control worker exposure to airborne contaminants. invironmental exposure ontrols 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 equipmen will be necessary to reduce emissions to acceptable levels. Individual protection 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 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, unles the assessment indicates a higher degree of protection: safety glasses with side-shields. | Distillates (petroleum), hyd | rotreated light paraffinic | TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 5 mg/m ³ 10 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist OSHA PEL (United States, 5/2018). |
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| ontrolscontaminants.Environmental exposure ontrolsEmissions 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 equipmen will be necessary to reduce emissions to acceptable levels.Individual protection measures Hygiene measuresImage: 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 protectionSafety 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, unles the assessment indicates a higher degree of protection: safety glasses with side- shields. | - | 10 mg/m3, ACGIH (TLV) TWA 5 m | g/m3 (highly refined) |
| ontrolsthey comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipmen will be necessary to reduce emissions to acceptable levels.Individual protection measuresImage: Mash 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, unles the assessment indicates a higher degree of protection: safety glasses with side- shields. | | | sufficient to control worker exposure to airborne |
| 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, unles the assessment indicates a higher degree of protection: safety glasses with side-shields. | | they comply with the requirements of cases, fume scrubbers, filters or en | of environmental protection legislation. In some gineering modifications to the process equipment |
| 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, unles the assessment indicates a higher degree of protection: safety glasses with side- shields. | ndividual protection meas | ures | |
| 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, unles the assessment indicates a higher degree of protection: safety glasses with side-shields. | Hygiene measures | eating, smoking and using the lavat Appropriate techniques should be u Contaminated work clothing should contaminated clothing before reusir | tory and at the end of the working period. used to remove potentially contaminated clothing. I not be allowed out of the workplace. Wash ng. Ensure that eyewash stations and safety |
| | Eye/face protection | assessment indicates this is necessing gases or dusts. If contact is possible the assessment indicates a higher of the second se | sary to avoid exposure to liquid splashes, mists, le, the following protection should be worn, unless |
| Skin protection | Skin protection | | |



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| 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 inadequate ventilation wear respiratory protection: Type A/P1 Warning ! filters have a limited use duration 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

| <u>Appearance</u> | | |
|--|---|--|
| Physical state | Liquid. [limpid] | |
| Color | Not available. | |
| Odor | Characteristic. | |
| Odor threshold | Not available. | |
| рН | Not available. | |
| Melting point/freezing point | Not available. | |
| Boiling point | Not available. | |
| Flash point | : Open cup: >200°C (>392°F) [ASTM D 92] | |
| Evaporation rate | Not available. | |
| Flammability (solid, gas) | Not available. | |
| Lower and upper explosive (flammable) limits | Not available. | |
| Vapor pressure | Not available. | |
| Vapor density | Not available. | |
| Relative density | : 0.875 [ASTM D 4052] | |
| Density | : 0.875 g/cm³ [15°C] | |
| Solubility | Insoluble in the following materials: cold water and hot water. | |
| Miscible with water | : No. | |
| Partition coefficient: n- octanol/water | Not applicable. | |



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| Auto-ignition temperature | Not available. | |
|---------------------------|--|-----|
| Decomposition temperature | Not available. | |
| Viscosity | Kinematic (40°C (104°F)): 110 to 131 mm²/s (110 to 131 cSt) [ASTM D 44 | 45] |
| 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 Mercaptans Hydrogen sulfide phosphorus oxides sulfur oxides Zinc oxides nitrogen oxides |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/substance | Result | Species | Dose | Exposure | Test |
|--|------------------------------------|----------------|-------------|----------|-------------|
| Distillates (petroleum), solvent-dewaxed heavy 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), | LC50 Inhalation Dusts | Rat - Male, | >5 mg/l | 4 hours | OECD 403 |
| hydrotreated heavy paraffinic | and mists | Female | | | Read across |
| | LD50 Dermal | Rabbit - Male, | >5000 mg/kg | - | OECD 402 |
| | | Female | | | Read across |
| | LD50 Oral | Rat - Male, | >5000 mg/kg | - | OECD 401 |
| | | Female | | | Read across |
| 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 |
| Molybdenum polysulphide long chain alkyl dithiocarbamate complex | LC50 Inhalation Dusts and mists | Rat | 5.1 mg/l | 4 hours | - |



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|--|--|----------------------|--------------------------|-----------|------------------|-------|
| | LD50 Dermal LD50 Oral | Rabbit Rat | 2500 mg/kg 2500 mg/kg | - - | - | |
| Conclusion/Summary | : Based on available of | lata, the classifica | ation criteria are no | t met. | | |
| Irritation/Corrosion | | | | | | |
| Skin | : Based on available da | ita, the classificat | ion criteria are not | met. | | |
| Eyes | : Based on available da | ita, the classificat | ion criteria are not | met. | | |
| Respiratory | : Based on available da | ita, the classificat | ion criteria are not | met. | | |
| <u>Sensitization</u> Skin | : Based on available da produce an allergic re | | tion criteria are me | t. Contai | ns Sensitizer. M | lay |
| Respiratory | : Based on available da | ata, the classifica | tion criteria are not | met. | | |
| Mutagenicity | | | | | | |
| Conclusion/Summary | : Based on available da | ita, the classificat | ion criteria are not | met. | | |
| Carcinogenicity | | | | | | |
| Conclusion/Summary | : Based on available da | ita, the classificat | ion criteria are not | met. | | |
| Reproductive toxicity | | | | | | |
| Conclusion/Summary | : Based on available da | ita, the classificat | ion criteria are not | met. | | |
| Teratogenicity | | | | | | |
| Conclusion/Summary | : Based on available da | ata, the classifica | tion criteria are not | met. | | |
| Specific target organ toxi Not available. | <u>city (single exposure)</u> | | | | | |
| | | | | | | |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

| Name | Result |
|--|--|
| Distillates (petroleum), hydrotreated heavy paraffinic | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

| Information on the likely : | Not available. |
|-----------------------------|----------------|
|-----------------------------|----------------|

routes of exposure

| 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, chemica | l and toxicological characteristics |
|---|-------------------------------------|
| | |

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



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| Ingestion | : No specific data. |
|--------------------------------|---|
| Delayed and immediate effe | ts and also chronic effects from short and long term exposure |
| <u>Short term exposure</u> | |
| 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 eff | <u>ects</u> |
| Not available. | |
| General | Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity | : During use in engines, contamination of oil with low levels of combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water. |
| 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 | | | | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/ I) |
|---|------|------|-----|----------------------------------|---|
| Molybdenum polysulphide long chain alkyl dithiocarbamate complex | 2500 | 2500 | N/A | N/A | 5.1 |

Section 12. Ecological information

| Product/substance | Result | Species | Exposure | Test |
|---|-------------------------|---|----------|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Acute EL50 >10000 mg/l | Crustaceans - Daphnia magna | 48 hours | OECD 202 |
| | Acute LL50 >1000 mg/l | Fish - Oncorhynchus mykiss | 96 hours | OECD 203 |
| | Chronic NOEL >1000 mg/l | Crustaceans - Daphnia magna | 21 days | OECD 211 |
| 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 - | 72 hours | OECD 201 |



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| | | Pseudokirchneriella subcapitata | | |
|--|--|---|----------------------|---------------|
| | Chronic NOEL >1000 mg/l | Crustaceans - Daphnia | 21 days | - |
| | | magna | | |
| Distillates (petroleum), hydrotreated light paraffinic | 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 |
| | Chronic NOEL >1000 mg/l | Fish - Oncorhynchus mykiss | 21 days | - |
| Molybdenum polysulphide long chain alkyl dithiocarbamate complex | Acute EC50 14 mg/l | Algae - Selenastrum capricornutum | 72 hours | OECD 201 |
| | Acute EC50 50 mg/l Acute LC50 94.8 mg/l | Daphnia - Daphnia magna Fish | 48 hours 96 hours | OECD 202 - |

Persistence and degradability

| Product/substance | Test | Result | | Dose | Inoculum |
|--|-------------------|----------------------|------------|------|------------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | OECD 301F | 31 % - Not readily - | 28 days | - | Activated sludge |
| Distillates (petroleum), hydrotreated heavy paraffinic | OECD 301F | 31 % - Not readily - | 28 days | - | Activated sludge |
| Product/substance | Aquatic half-life | | Photolysis | ; | Biodegradability |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | - | | - | | Not readily |
| Distillates (petroleum), hydrotreated heavy paraffinic | - | | - | | Not readily |
| Molybdenum polysulphide long chain alkyl dithiocarbamate complex | - | | - | | Not readily |

Bioaccumulative potential

| Product/substance | LogKow | BCF | Potential |
|---|--------|-----|-----------|
| Distillates (petroleum), solvent-dewaxed heavy | 9.2 | 260 | low |
| paraffinic Distillates (petroleum), hydrotreated heavy paraffinic | >4 | - | high |
| Molybdenum polysulphide long chain alkyl dithiocarbamate complex | 5.1 | - | high |

| <u>Mobility in soil</u> | |
|--|--|
| Soil/water partition coefficient (Koc) | : 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. |

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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. |

Additional information

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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 : Not available. to IMO instruments

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Section 15. Regulatory information

| U.S. Federal regulations | : TSCA 8(a) CDR Exempt/Partial exemption: Not determined |
|---|--|
| | Clean Water Act (CWA) 307 : zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis (dithiophosphate) |
| Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) | : Not listed |
| Clean Air Act Section 602 Class I Substances | : Not listed |
| Clean Air Act Section 602 Class II Substances | : Not listed |

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| TotalEnergies | | | SDS # : | 089619 |
|--|---|--|------------------|--------|
| DEA List I Chemicals : N (Precursor Chemicals) | ot listed | | | |
| DEA List II Chemicals : N (Essential Chemicals) | ot listed | | | |
| <u>SARA 302/304</u> | | | | |
| Composition/information on ing | <u>redients</u> | | | |
| No products were found. | | | | |
| SARA 304 RQ : N | ot applicable. | | | |
| <u>SARA 311/312</u> | | | | |
| HN | IN SENSITIZATION OC - Defatting irrita | | | |
| Composition/information on inc | <u>redients</u> | | | |
| Name | % | Classification | | |
| Distillates (petroleum), solvent- dewaxed heavy paraffinic | ≤10 | ASPIRATION HAZARD - Category 1 | | |
| Distillates (petroleum), hydrotreated heavy paraffinic | ≤3 | ASPIRATION HAZARD - Category 1 | | |
| Distillates (petroleum), hydrotreated light paraffinic | ≤3 | ASPIRATION HAZARD - Category 1 | | |
| Molybdenum polysulphide long chain alkyl dithiocarbamate complex | ≤0.3 | SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 | | |
| State regulations | | | | |
| | | nents are listed: OIL MIST, MINERAL; OIL M ROLEUM DISTILLATES, HYDROTREATED I | | |
| New York : N | one of the compone | ents are listed. | | |
| New Jersey : N | one of the compone | ents are listed. | | |
| | one of the compone | ents are listed. | | |
| <u>California Prop. 65</u> | | | | |
| To the best of our knowledge cause cancer, developmental | | not contain any substances known to the Stat e harm | te of California | a to |
| International regulations | | | | |
| Chemical Weapon Convention L Not listed. | ist Schedules I, II & | & III Chemicals | | |
| Montreal Protocol | | | | |
| Not listed. | | | | |
| Stockholm Convention on Persis Not listed. | stent Organic Pollu | <u>utants</u> | | |

Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

| Inventory list | |
|-----------------------------|--|
| Australia inventory (AIIC) | : All components are listed or exempted. |
| Canada inventory (DSL/NDSL) | : All components are listed or exempted. |



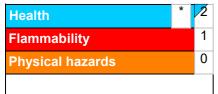
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| China inventory (IECSC) | : All components are listed or exempted. |
|---|--|
| Europe inventory (EINECS/ELINCS/NLP) | : Not determined. |
| Japan inventory | Japan inventory (CSCL): At least one component is not listed. Japan inventory (ISHL): At least one component is not listed. |
| New Zealand Inventory of Chemicals (NZIoC) | : All components are listed or exempted. |
| Philippines inventory (PICCS) | : Not determined. |
| Korea inventory (KECI) | : Not determined. |
| Taiwan Chemical Substances Inventory (TCSI) | : All components are listed or exempted. |
| Thailand inventory | : At least one component is not listed. |
| 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.)



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.)



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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



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| | Classification | Justification |
|---------------------------|--|---|
| SKIN SENSITIZATION - Cat | SKIN SENSITIZATION - Category 1 | |
| <u>History</u> | | |
| Date of revision | : 2022/05/11 | |
| Date of previous revision | : 2022/05/11 | |
| Version | : 2 | |
| Key to abbreviations | : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classifica IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition MARPOL = International Convention for the Preve as modified by the Protocol of 1978. ("Marpol" = m N/A = Not available SGG = Segregation Group UN = United Nations | coefficient ention of Pollution From Ships, 1973 |
| References | : Not available. | |

Indicates information that has changed from previously issued version.

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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.