



**Safety Data Sheet**  
**103 Moly Hi Plus**  
**Grease**

**SDS Revision Date: 10/09/2024**

**Section 1. Identification**

**Product identifier**

**Product Identity** 103 Moly Hi Plus  
**Other means of identification** Grease Not  
Applicable

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

Lubricant

**Details of the supplier of the safety data sheet**

**Company Name** Southwestern Petroleum Lubricants LLC  
3401 Quorum Drive, Suite 360  
Fort Worth, Texas 76137

**Emergency**

**24 hour Emergency Telephone No.** 734 930-0009

**Customer Service:**

Emergency numbers call Chemtrec 24/7 USA and Canada 1-800-424-9300 or 1-703-527-3887

**Section 2. Hazard(s) identification**

**Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)**

Skin sensitizer category 1;H317

May cause an allergic skin reaction.

**Label elements**



**Warning**

H317 May cause an allergic skin reaction.

**[Prevention]:**

- P261 Avoid breathing dust, fume, gas, mist, vapors, spray.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves, eye protection, and face protection.

**[Response]:**

- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P333+313 If skin irritation or a rash occurs: Get medical advice or attention.
- P362+364 Take off contaminated clothing and wash it before reuse.

**[Storage]:**

No GHS storage statements

**[Disposal]:**

P501 Dispose of contents or container in accordance with local and national regulations.

**Other hazards**

This product contains no PBT/vPvB chemicals.  
 This product contains no endocrine disrupting chemicals.

**Section 3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the OSHA’s Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
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Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil- unspecified CAS Number: 64742-52-5 Synonyms: Distillate (petroleum) hydrotreated heavy naphthenic, Polymer Binders and Adhesive	30 - 60	Not Classified	No data available
Distillates (petroleum), hydrotreated light naphthenic CAS Number: 64742-53-6 Synonyms: Distillates (petroleum), hydrotreated light naphthenic; Baseoil-unspecified	30 - 60	Not Classified	No data available
Barium, acetate tallow fatty acids complexes CAS Number: 68201-19-4 Synonyms: Barium, acetate tallow fatty acids complexes	30 - 60		No data available
Molybdenum (iv) sulfide CAS Number: 1317-33-5 Synonyms: Molybdenum sulfide	1 - 5	Not Classified	No data available
Graphite CAS Number: 7782-42-5 Synonyms: Graphite	1 - 5	Not Classified	No data available
Carbamodithioic acid, dibutyl-, methylene ester CAS Number: 10254-57-6 Synonyms: Carbamodithioic acid, dibutyl-, methylene ester	0.5 - 1.5	Not Classified	No data available
1,3,4-thiadiazole, 2,5-bis(octyldithio)- CAS Number: 13539-13-4 Synonyms: 1,3,4-thiadiazole, 2,5-bis(octyldithio)-	0.1 - 1	Skin corrosion/irritation category 2;H315 Skin sensitizer category 1;H317 Acute toxicity(inhalation), category 4;H332 Serious eye damage / eye irritation, category 2;H319	No data available

The actual concentration or concentration range is withheld as a trade secret.

\*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

**Section 4. First aid measures**

**Description of first aid measures**

**General** In all cases of doubt, or when symptoms persist, seek medical attention.  
Never give anything by mouth to an unconscious person.

**Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or



stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes** Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion** DO NOT INDUCE VOMITING! If swallowed, vomiting may occur spontaneously. If vomiting occurs, keep your head below hips to prevent aspiration into lungs. Rinse mouth thoroughly. Get medical attention.

### **Most important symptoms and effects, both acute and delayed**

**Overview** If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhea. Treat symptomatically. See section 2 for further details.

**Skin** May cause an allergic skin reaction.

## **Section 5. Fire-fighting measures**

### **Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Unsuitable extinguishing media: Do not use; water jet.

### **Special hazards arising from the substance or mixture**

Hazardous decomposition: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.  
Avoid breathing dust, fume, gas, mist, vapors, spray.



### **Advice for fire-fighters**

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full-face piece and protective clothing. Persons without respiratory protection should leave the area. Wear SCBA during clean-up immediately after fire. No smoking.

**ERG Guide No.**

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## **Section 6. Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Put on appropriate personal protective equipment (see section 8).  
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### **Environmental precautions**

Do not allow spills to enter drains or waterways.

### **Methods and material for containment and cleaning up**

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

Local authorities should be advised if significant spillages cannot be contained.

## **Section 7. Handling and storage**

### **Precautions for safe handling**

Handle containers carefully to prevent damage and spillage.  
Avoid prolonged or repeated contact with skin. Avoid inhaling vapor and/or mist. When handling product in drums, safety footwear should be worn, and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning



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materials to prevent fires. Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closeable containers.

This material has the potential to be a static accumulator. Proper grounding and bonding procedures should be used during all bulk transfer operations.

Use product with caution around heat, sparks, pilot lights, static electricity and open flame.

See section 2 for further details. - [Prevention]:

**Conditions for safe storage, including any incompatibilities**

Storage Temperature: -50 - 50C ( -58 - 122F)

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

Do not use PVC.

Incompatible materials: No available information

See section 2 for further details. - [Storage]:

**Specific end use(s)**

No available information

**Section 8. Exposure controls / personal protection**

**Control parameters**

**Exposure**

CAS No.	Ingredient	Source	Value
1317-33-5	Molybdenum (iv) sulfide	OSHA	TWA 2.5 mg/m <sup>3</sup> (as F)
		ACGIH	TWA 2.5 mg/m <sup>3</sup> (as F)
		NIOSH	TWA 2.5 mg/m <sup>3</sup> [*Note: The REL also applies to other inorganic, solid fluorides (as F).]
7782-42-5	Graphite	OSHA	5 mg/m <sup>3</sup> (respirable fraction), 15 mg/m <sup>3</sup> (total dust), 15 mppcf (natural)
		ACGIH	2 mg/m <sup>3</sup> (R) Respirable fraction
		NIOSH	TWA 2.5 mg/m <sup>3</sup> (resp)
10254-57-6	Carbamodithioic acid, dibutyl-, methylene ester	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
13539-13-4	1,3,4-thiadiazole, 2,5-bis(octyldithio)-	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic	OSHA	No Established Limit
		ACGIH	No Established Limit



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CAS No.	Ingredient	Source	Value
68201-19-4	Barium, acetate tallow fatty acids complexes	NIOSH	No Established Limit
		OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m<sup>3</sup>OSHA PEL and 5 mg/m<sup>3</sup>ACGIH.

**Exposure controls**

**Respiratory** If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

**Eyes** Protective safety glasses recommended

**Skin** Skin protection is not required under normal conditions of use. Oil impervious gloves and oil impermeable apron recommended.

**Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

**Section 9. Physical and chemical properties**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Gel
<b>Color</b>	Brown, Amber
<b>Odor</b>	None
<b>Melting point / freezing point</b>	325F
<b>Initial boiling point and boiling range</b>	No available information
<b>Flammability (solid, gas)</b>	No available information
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:10</b> <b>Upper Explosive Limit:5</b>



Flash Point	250 C base oils Open cup
Auto-ignition temperature	320C
Decomposition temperature	No available information
pH	Neutral
Viscosity (cSt)	No available information
Solubility in Water	Insoluble in water
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapor pressure (Pa)	No available information
Relative Density	0.9
Vapor Density	No available information
Evaporation rate (Ether = 1)	Nil
VOC Content	None

**Other information**

DMSO extract by IP346: Less than 3.0 wt % (mineral oil component only)

**Section 10. Stability and reactivity**

**Reactivity**

Hazardous Polymerization will not occur.

**Chemical stability**

Stable under normal circumstances.

**Possibility of hazardous reactions**

No available information

**Conditions to avoid**

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

**Incompatible materials**

No available information

**Hazardous decomposition products**

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

**Section 11. Toxicological information**





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**Acute toxicity**

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified - (64742-52-5)	> 5,000.00, Rat - Category: NA	No data available.	No data available.	5.70, Rat - Category: NA	No data available.
Distillates (petroleum), hydrotreated light naphthenic - (64742-53-6)	> 5,000.00, Rat - Category: NA	> 5,000.00, Rabbit - Category: NA	No data available.	No data available.	No data available.
Barium, acetate tallow fatty acids complexes - (68201-19-4)	No data available.	No data available.	No data available.	No data available.	No data available.
Molybdenum (iv) sulfide - (1317-33-5)	No data available.	No data available.	No data available.	2.82, Rat - Category: 4	No data available.
Graphite - (7782-42-5)	> 2,000.00, Rat - Category: 4	No data available.	No data available.	> 2,000.00, Rat - Category: NA	No data available.
Carbamodithioic acid, dibutyl-, methylene ester - (10254-57-6)	No data available.	No data available.	No data available.	No data available.	No data available.
1,3,4-thiadiazole, 2,5-bis(octyl)dithio)- - (13539-13-4)	No data available.	No data available.	No data available.	No data available.	No data available.

**Carcinogen Data**

CAS No.	Ingredient	Source	Value
1317-33-5	Molybdenum (iv) sulfide	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
7782-42-5	Graphite	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;



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CAS No.	Ingredient	Source	Value
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
10254-57-6	Carbamodithioic acid, dibutyl-, methylene ester	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
13539-13-4	1,3,4-thiadiazole, 2,5-bis(octylidithio)-	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil- unspecified	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
68201-19-4	Barium, acetate tallow fatty acids complexes	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry:

**Symptoms and effects, both acute and delayed::**



If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhea. Treat symptomatically.

**Skin** May cause an allergic skin reaction.

**Section 12. Ecological information**

**Toxicity**

Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be harmful: LL/EL/IL50 10-100 mg/l (to aquatic organisms) LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract.

**Aquatic Ecotoxicity**

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified - (64742-52-5)	5,000.00, Oncorhynchus mykiss	1,000.00, Daphnia magna	1,000.00, Scenedesmus subspicatus
Distillates (petroleum), hydrotreated light naphthenic - (64742-53-6)	No data available.	No data available.	No data available.
Barium, acetate tallow fatty acids complexes - (68201-19-4)	No data available.	No data available.	No data available.
Molybdenum (iv) sulfide - (1317-33-5)	No data available.	No data available.	No data available.
Graphite - (7782-42-5)	100.00, Danio rerio	> 100.00, Daphnia magna	> 100.00, Pseudokirchnerella subcapitata
Carbamodithioic acid, dibutyl-, methylene ester - (10254-57-6)	No data available.	No data available.	No data available.



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Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
1,3,4-thiadiazole, 2,5-bis(octyl)dithio)- - (13539-13-4)	No data available.	No data available.	No data available.

**Persistence and degradability**

Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.

**Bioaccumulative potential**

Contains components with the potential to bioaccumulate.

**Mobility in soil**

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

**Results of PBT and vPvB assessment**

This product contains no PBT/vPvB chemicals.

**Other adverse effects**

No available information

**Section 13. Disposal considerations**

**Waste treatment methods**

Observe all federal, provincial and local regulations when disposing of this substance.

**Section 14. Transport information**

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>UN number</b>	Not Regulated	Not Regulated	Not Regulated
<b>UN proper shipping name</b>	Not Regulated	Not Regulated	Not Regulated
<b>Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>IMDG:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable <b>Sub Class:</b> Not Applicable





**Proposition 65 - Developmental Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 Label Warning:**

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**Section 16. Other information**

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.



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H332 Harmful if inhaled.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders

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