



Section 1. Identification

Product identifier

Product Identity	103 Moly Hi Plus Grease
Other means of identification	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

This SDS is aligned with the Workplace Hazardous Materials Information System (WHMIS) and with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Classification of the substance or mixture

Skin Sens. 1;H317	May cause an allergic skin reaction.
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Label elements



Warning

H317 May cause an allergic skin reaction.

[Prevention]:

P261 Avoid breathing dust, fume, gas, mist, vapours, 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 Hazardous Products Regulations.



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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	----
Distillates (petroleum), hydrotreated light naphthenic CAS Number: 64742-53-6 Synonyms: Distillates (petroleum), hydrotreated light naphthenic; Baseoil-unspecified	30 - 60	Not Classified	----
Barium, acetate tallow fatty acids complexes CAS Number: 68201-19-4 Synonyms: Barium, acetate tallow fatty acids complexes	30 - 60		----
Molybdenum (iv) sulfide CAS Number: 1317-33-5 Synonyms: Molybdenum sulfide	1 - 5	Not Classified	----
Graphite CAS Number: 7782-42-5 Synonyms: Graphite	1 - 5	Not Classified	----
Carbamodithioic acid, dibutyl-, methylene ester CAS Number: 10254-57-6 Synonyms: Carbamodithioic acid, dibutyl-, methylene ester	0.5 - 1.5	Not Classified	----
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 Irrit. 2;H315 Skin Sens. 1;H317 Acute Tox. 4;H332 Eye Irrit. 2;H319	----

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, CO₂, 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, vapours, 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



area. Wear SCBA during clean-up immediately after fire. No smoking.

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 vapour 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 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	ACGIH	TWA 2.5 mg/m ³ (as F)
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
Yukon	No Established Limit		
7782-42-5	Graphite	ACGIH	2 mg/m ³ (R) Respirable fraction
		Alberta	2 mg/m ³ TWA (all forms except Graphite fibres, respirable)
		British Columbia	2 mg/m ³ TWA (all forms except Graphite fibres, respirable)
		Manitoba	2 mg/m ³ TWA (all forms except Graphite fibres, respirable particulate matter)
		New Brunswick	2 mg/m ³ TWA (all forms except graphite fibres)
		Newfoundland and Labrador	2 mg/m ³ TWA (all forms except Graphite fibers, respirable particulate matter)
		Nova Scotia	2 mg/m ³ TWA (all forms except Graphite fibers, respirable particulate matter)
		Northwest Territories	2 mg/m ³ TWA (natural, all forms, except Graphite fibres, respirable fraction) 4 mg/m ³ STEL (natural, all forms, except Graphite fibres,
		Yukon	2 mg/m ³ TWA (natural, all forms, except Graphite fibres, respirable fraction) 4 mg/m ³ STEL (natural, all forms, except Graphite fibres,



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CAS No.	Ingredient	Source	Value
			respirable fraction)
		Nunavut	2 mg/m ³ TWA (natural, all forms, except Graphite fibres, respirable fraction) 4 mg/m ³ STEL (natural, all forms, except Graphite fibres, respirable fraction)
		Ontario	2 mg/m ³ TWA (except Graphite fibres, respirable)
		Prince Edward Island	2 mg/m ³ TWA (all forms except Graphite fibers, respirable particulate matter)
		Quebec	2 mg/m ³ TWAEV (containing no Asbestos and <1% Crystalline silica, except Graphite fibres, respi
		Saskatchewan	2 mg/m ³ TWA (natural, except Graphite fibres, respirable fraction) 4 mg/m ³ STEL (natural, except Graphite fibres, respirable fraction)
		Yukon	20 mppcf TWA; 30 mppcf TWA (synthetic); 10 mg/m ³ TWA (synthetic)
10254-57-6	Carbamodithioic acid, dibutyl-, methylene ester	ACGIH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
13539-13-4	1,3,4-thiadiazole, 2,5-bis(octyl)dithio)-	ACGIH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified	ACGIH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit



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CAS No.	Ingredient	Source	Value
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic	ACGIH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit
68201-19-4	Barium, acetate tallow fatty acids complexes	ACGIH	No Established Limit
		Alberta	No Established Limit
		British Columbia	No Established Limit
		Manitoba	No Established Limit
		New Brunswick	No Established Limit
		Newfoundland and Labrador	No Established Limit
		Nova Scotia	No Established Limit
		Northwest Territories	No Established Limit
		Nunavut	No Established Limit
		Ontario	No Established Limit
		Prince Edward Island	No Established Limit
		Quebec	No Established Limit
		Saskatchewan	No Established Limit
		Yukon	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m³OSHA PEL and 5 mg/m³ACGIH.

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 using local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapour 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

Physical State	Gel
Color	Brown, Amber
Odour	None
Melting point / freezing point	325F
Initial boiling point and boiling range	No available information
Flammability (solid, gas)	No available information
Upper/lower flammability or explosive limits	Lower Explosive Limit:10 Upper Explosive Limit:5
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
Vapour pressure (Pa)	No available information
Relative Density	0.9
Vapour 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

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 vapour 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.



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Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
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	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
7782-42-5	Graphite	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
10254-57-6	Carbamodithioic acid, dibutyl-, methylene ester	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
13539-13-4	1,3,4-thiadiazole, 2,5-bis(octyl)dithio)-	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
64742-53-6	Distillates (petroleum), hydrotreated light naphthenic	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit
68201-19-4	Barium, acetate tallow fatty acids complexes	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: 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



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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.
1,3,4-thiadiazole, 2,5-bis(octylidithio)- - (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

Classification Method: Classified as per Part 2, Sections 2.1-2.8 of the Transportation of Dangerous Goods Regulations.

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

Environmental hazards

Marine Pollutant: No;

Special precautions for user

No available information

Section 15. Regulatory information

This product has been classified in accordance with the hazard criteria Hazardous Products Regulations (SOR/2015-17 amended 2022-12-15) and the SDS contains all of the information required by those regulations.

Canadian Domestic Substance List (DSL):

1,3,4-thiadiazole, 2,5-bis(octyldithio)-



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Barium, acetate tallow fatty acids complexes

Carbamodithioic acid, dibutyl-, methylene ester

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified

Distillates (petroleum), hydrotreated light naphthenic

Graphite

Lubricating oils, petroleum, hydrotreated spent

Molybdenum (iv) sulfide

Polyisobutylene

Canadian Non-Domestic Substance List (NDSL):

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

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.



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H319 Causes serious eye irritation.

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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