

SDS Revision Date: 05/28/2023

1. Identification
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1.1. Product identifier			
Product Identity	103 HI Plus Moly Grease		
Alternate Names	Hi Plus Moly		
1.2. Relevant identified uses of the substance or m	ixture and uses advised against		
Intended use	See Technical Data Sheet.		
1.3. 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: Southwestern Petroleum	Emergency numbers call Chemtrec 24/7 USA and		
Lubricants LLC	Canada 1-800-424-9300 or 1-703-527-3887		

### 2. Hazard(s) identification

### 2.1. Classification of the substance or mixture

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

### 2.2. Label elements



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, face protection.

## [Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment (see information on this label).

P333+313 If skin irritation or a rash occurs: Get medical advice or attention.

P362 Take off contaminated clothing and wash before reuse.

# [Storage]:

No GHS storage statements

# [Disposal]:

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

# 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Distillates (petroleum), hydrotreated light naphthenic CAS Number: 0064742-53-6	25 - 50	Asp. Tox. 1;H304	
Carbamodithioic acid, dibutyl-, methylene ester CAS Number: 0010254-57-6	1 - 5	Not Classified	
1,3,4-thiadiazole, 2,5-bis(octyldithio)- CAS Number: 0013539-13-4		Skin Irrit. 2;H315 Skin Sens. 1;H317 Acute Tox. 4;H332 Eye Irrit. 2;H319	

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been 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

### 4.1. 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 head below hips to prevent aspiration into lungs. Rinse mouth thoroughly. Get medical attention.
4.2. Most import	tant 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. Check section 2.2 (GHS Label Elements) for further details.

in May cause an allergic skin reaction.

### Section 5. Fire-fighting measures

#### 5.1. Extinguishing media

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

#### 5.2. 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.

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#### **5.3. 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 cleanup immediately after fire. No smoking.

ERG Guide No.

### Section 6. Accidental release measures

#### 6.1. 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.

#### **6.2. Environmental precautions**

Do not allow spills to enter drains or waterways.

### 6.3. Methods and material for containment and cleaning up

Slippery when spilled. Avoid accidents, clean up immediately. Prevent 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

### 7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Avoid prolonged or repeated contact with skin. Avoid inhaling vapor and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose

Skin

of any contaminated rags or cleaning materials in order 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.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]:

### 7.2. 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

Check section 2.2 (GHS Label Elements) for further details. - [Storage]:

### 7.3. Specific end use(s)

No available information

# Section 8. Exposure controls / personal protection

# **8.1.** Control parameters

Exposure				
CAS No.	Ingredient	Source	Value	
0010254-57-6	Carbamodithioic acid, dibutyl-, methylene ester	OSHA	No Established Limit	
		ACGIH	No Established Limit	
		NIOSH	No Established Limit	
0013539-13-4	1,3,4-thiadiazole, 2,5-bis(octyldithio)-	OSHA	No Established Limit	
		ACGIH	No Established Limit	
		NIOSH	No Established Limit	
0064742-53-6	Distillates (petroleum), hydrotreated light	OSHA	No Established Limit	
	naphthenic		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 10 mg/m<sup>3</sup> ACGIH. **8.2. Exposure controls** 

If workers are exposed to concentrations above the exposure limit they must use the
appropriate, certified respirators.
Protective safety glasses recommended
Skin protection is not required under normal conditions of use. Oil impervious
gloves and oil impermeable apron recommended.
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.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking
or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.
S Label Elements) for further details [Prevention]:

## Section 9. Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<b>7.1.</b> Information on basic physical and chemical p	ropernes
Physical State	Gel
Color	Dark Gray
Odor	Petroleum distillate
Odor threshold	No available information
рН	No available information
Melting point / freezing point	No available information
Initial boiling point and boiling range	No available information
Flash Point	179°C, Test method: (Open cup)
<b>Evaporation rate (Ether = 1)</b>	No available information
Flammability (solid, gas)	No available information
Upper/lower flammability or explosive limits	Lower Explosive Limit: 0.9
	-
	Upper Explosive Limit: 7.0
Vapor pressure (Pa)	-
	<b>Upper Explosive Limit:</b> 7.0
Vapor pressure (Pa)	<b>Upper Explosive Limit:</b> 7.0 No available information
Vapor pressure (Pa) Vapor Density	<b>Upper Explosive Limit:</b> 7.0 No available information >5
Vapor pressure (Pa) Vapor Density Relative Density	Upper Explosive Limit: 7.0 No available information >5 0.9
Vapor pressure (Pa) Vapor Density Relative Density Solubility in Water	Upper Explosive Limit: 7.0 No available information >5 0.9 No available information
Vapor pressure (Pa) Vapor Density Relative Density Solubility in Water Partition coefficient n-octanol/water (Log Kow)	<b>Upper Explosive Limit:</b> 7.0 No available information >5 0.9 No available information No available information
Vapor pressure (Pa) Vapor Density Relative Density Solubility in Water Partition coefficient n-octanol/water (Log Kow) Auto-ignition temperature	<b>Upper Explosive Limit:</b> 7.0 No available information >5 0.9 No available information No available information 343C
Vapor pressure (Pa) Vapor Density Relative Density Solubility in Water Partition coefficient n-octanol/water (Log Kow) Auto-ignition temperature Decomposition temperature	Upper Explosive Limit: 7.0 No available information >5 0.9 No available information No available information 343C No available information
Vapor pressure (Pa) Vapor Density Relative Density Solubility in Water Partition coefficient n-octanol/water (Log Kow) Auto-ignition temperature Decomposition temperature Viscosity (cSt)	<b>Upper Explosive Limit:</b> 7.0 No available information >5 0.9 No available information No available information 343C No available information No available information

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

# Section 10. Stability and reactivity

### 10.1. Reactivity

Hazardous Polymerization will not occur.

### **10.2.** Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No available information

10.4. Conditions to avoid

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

### **10.5. Incompatible materials**

No available information

## 10.6. 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 Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Distillates (petroleum), hydrotreated light naphthenic - (64742-	> 5,000.00, Rat -	> 5,000.00, Rabbit - Category: NA	No data	No data	No data
53-6)	Category: NA		available	available	available
Carbamodithioic acid, dibutyl-, methylene ester - (10254-57-6)	No data	No data	No data	No data	No data
	available	available	available	available	available
1,3,4-thiadiazole, 2,5-bis(octyldithio) (13539-13-4)	No data	No data	No data	No data	No data
	available	available	available	available	available

# **Carcinogen Data**

CAS No.	Ingredient	Source	Value		
0010254-57-6	Carbamodithioic acid, dibutyl-,	OSHA	Regulated Carcinogen: No		
	methylene ester	NTP	Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Established Limit		
0013539-13-4	1,3,4-thiadiazole, 2,5-bis(octyldithio)-		Regulated Carcinogen: No		
		NTP IARC	NTP Known: No; Suspected: No		
		ACGIH	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; No Established Limit		
0064742-53-6	Distillates (petroleum), hydrotreated	OSHA	Regulated Carcinogen: No		
0001712000	light naphthenic	NTP	Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
		ACGIH	No Established Limit		
Classification	1	Category	y Hazard Description		
Acute toxici	ty (oral)		Not Applicable		
Acute toxici	ty (dermal)		Not Applicable		
Acute toxici	ty (inhalation)		Not Applicable		
Skin corrosi	on/irritation		Not Applicable		
Serious eye	damage/irritation		Not Applicable		
Respiratory	sensitization		Not Applicable		
Skin sensitiz	ation	1	May cause an allergic skin reaction.		
Germ cell mutagenicity			Not Applicable		
Carcinogeni	city		Not Applicable		
Reproductiv	e toxicity		Not Applicable		
STOT-single	e exposure		Not Applicable		
STOT-repea	ted exposure		Not Applicable		

### Section 12. Ecological information

### 12.1. 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 light naphthenic - (64742- 53-6)	Not Available	Not Available	Not Available
Carbamodithioic acid, dibutyl-, methylene ester - (10254-57-6)	Not Available	Not Available	Not Available
1,3,4-thiadiazole, 2,5-bis(octyldithio) (13539-13-4)	Not Available	Not Available	Not Available

### 12.2. 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.

### **12.3. Bioaccumulative potential**

Contains components with the potential to bioaccumulate.

#### 12.4. 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.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

#### 12.6. Other adverse effects

No available information

## Section 13. Disposal considerations

#### **13.1.** Waste treatment methods

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

### **Section 14. Transport information**

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping	g Not Regulated	Not Regulated	Not Regulated
name			
14.3. Transport hazard	DOT Hazard Class: Not	IMDG: Not Applicable	Air Class: Not
class(es)	Applicable	Sub Class: Not	Applicable
	Sub Class: Not Applicable	Applicable	

**Sub Class:** Not Applicable Not Applicable

14.4. Packing groupNot Applicable14.5. Environmental hazardsIMDGMarine Pollutant: No;14.6. Special precautions for user<br/>No available information

# Section 15. Regulatory information

Not Applicable

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic SubstanceAll components of this material are either listed or exempt from listing on the TSCAControl Act (TSCA)Inventory.

### **EPCRA 302 Extremely Hazardous:**

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

### **EPCRA 313 Toxic Chemicals:**

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

### Proposition 65 - Carcinogens (>0.0%):

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

### **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.

Chemical Name (CAS Number)	US TSCA	Australia AICS		EU EINECS	EU ELINCS	EU SVHC	EN NLP	Mexico INSQ
Distillates (petroleum), hydrotreated light	Yes	Yes	Yes	Yes	No	No	No	No

naphthenic (0064742-53- 6)								
Carbamodithioic acid, dibutyl-, methylene ester (0010254-57-6)	Yes	Yes	Yes	Yes	No	No	No	No
1,3,4-thiadiazole, 2,5- bis(octyldithio)- (0013539- 13-4)	No	Yes	Yes	Yes	No	No	No	No

Chemical Name (CAS Number)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR 1	Japan PRTR 2	Philippines PICCS	New Zealand NZIOC
Distillates (petroleum), hydrotreated light naphthenic (0064742-53- 6)	Yes	No	No	No	No	No	Yes	Yes
Carbamodithioic acid, dibutyl-, methylene ester (0010254-57-6)	Yes	Yes	No	No	No	No	Yes	Yes
1,3,4-thiadiazole, 2,5- bis(octyldithio)- (0013539- 13-4)	Yes	Yes	No	No	No	No	Yes	Yes

# Section 16. Other information

### SDS Revision Date 05/28/2023

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:

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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 End of Document