



Material Safety Data Sheet

Prepared according to OSHA Hazard Communication Standard (29 CFR 1910.1200) and ANSI MSDS Standard (Z400.1). Complies with Canadian Workplace Hazardous Materials Information System (WHMIS) standards.

Revision Date 27-Jun-2014

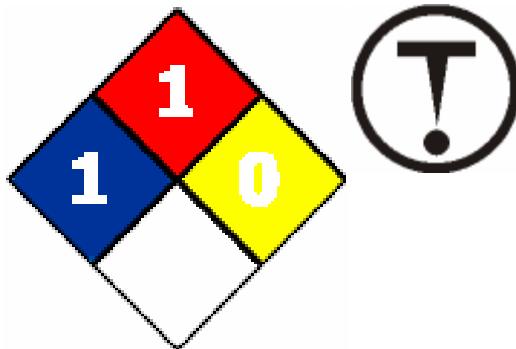
Revision Number 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	SWEPCO 103 Moly HI Plus Grease
Product Code	W20059
Chemical Family	Petroleum hydrocarbon
Recommended Use	Lubricant
Supplier Address	Southwestern Petroleum Corporation, 534 North Main St, Fort Worth, TX 76106 USA 1-800-877-9372 www.swepcousa.com
Emergency Telephone Number	Chemtrec 1-800-424-9300 in US; Canutec 1-613-996-6666 in Canada.
UN-No	None

2. HAZARDS IDENTIFICATION

Emergency Overview	Not expected to present a significant health hazard upon short term exposure. May cause skin irritation and/or dermatitis. May be harmful if swallowed. Product is combustible but will not readily ignite.
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NFPA				
Health	1	Flammability	1	Instability
WHMIS	D2B - Other Toxic			
Appearance	Grey	Physical State	Grease	Odor
Principle Routes of Exposure	Skin contact. Eye contact.			

Acute Health Effects

Skin	Avoid prolonged and/or repeated contact with skin. Prolonged and/or repeated contact with this material may produce skin irritation or inflammation. Personnel with pre-existing skin disorders should avoid contact with this product.
Eyes	Contact with eyes may cause irritation.
Inhalation	None known.
Ingestion	Ingestion is not considered a likely route of exposure. Low order of acute oral toxicity, but minute amounts aspirated into the lungs during ingestion may cause mild to severe pulmonary injury and possibly death.
Carcinogenic Effects	Carcinogenic effect of the complete mixture has not been evaluated. Information on individual ingredients which may have carcinogenic effects, if any, will be found in Section 3 & 11.

Chronic Health Effects

Reports have associated repeated and prolonged occupational overexposure to petroleum based products with liver, kidney, brain and nervous system damage. There is, however, no reported human evidence that these effects occur when exposure is maintained below OSHA and ACGIH limits

Aggravated Medical Conditions No information available.

See Section 11 for additional toxicological information.

See Section 12 for ecological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

If any of the components of this product are defined as hazardous by OSHA Hazard Communication Standard 1910.1200 and are present at 1% or more (0.1% or more for carcinogens) or are considered hazardous components according to Canadian WHIMIS standards, they will be listed in this section. If no components appear in this section, no components of the product meet or exceed the reporting requirements.

Component	CAS-No	EINECS	Weight %	IARC	OSHA	NTP Carc	WHIMIS
Barium hydroxide, monohydrate 22326-55-2 (1 - 9.99)	22326-55-2		1 - 9.99	-	-	-	D2B

4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	First aid is not required.

Ingestion Consult a physician or Poison Control Center immediately. Do not induce vomiting without medical advice.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties Combustible material: may burn but does not ignite readily.

Suitable Extinguishing Media Water spray or fog, dry chemical, carbon dioxide (CO₂) or foam. Cool containers with flooding quantities of water until well after fire is out

Hazardous Combustion Products No information available.

Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes and clothing.

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-up Take up mechanically and collect in suitable container for disposal.

Other Information Report spills as required to the appropriate authorities.

7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practice.

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

The table below lists known exposure levels for any components of this product which are considered hazardous. Keep in mind, however, that these exposure levels are for pure concentrations of these ingredients. If no table appears below, occupational exposure limits have not been established or are not known for any of the ingredients in this product:

Chemical Name	ACGIH TLV	OSHA PEL	Quebec OEL	Ontario TWAEV	EU OEL
Barium hydroxide, monohydrate	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³		

Engineering Controls

Use in well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits (ACGIH TLV TWA: 5 mg/m³; ACGIH TLV STEL: 10 mg/m³; OSHA PEL TWA: 5 mg/m³).

Eye/face Protection

Safety glasses with side-shields.

Skin Protection

Use protective gloves and clothing if contact with product is likely.

Respiratory Protection

If personal exposure levels cannot be maintained below accepted exposure limits or if irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State	Grey Grease	Odor pH	Petroleum distillates No data available
Flash Point	179 °C	Autoignition Temperature	> 343 °C
Boiling Point/Range	Not applicable	Melting Point/Range	Not applicable
Flammability Limits in Air, %		Lower 0.9 Upper 7.0	
Specific Gravity (Water=1)	0.9	Solubility In Water	Insoluble
Vapor Density (Air=1)	>5	Volatiles, % Vol	0

10. STABILITY AND REACTIVITY

Chemical Stability Stable under recommended storage conditions.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Hydrocarbons. Carbon monoxide. Hydrogen sulfide (H₂S) may be produced above 250 °F (121 °C).

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Toxicity of this complete mixture has not been evaluated. If information is available on any of the individual components of the mixture, it is presented in this section. If no information appears in this section, there is no toxicological information available for any of the components of the mixture.

Acute Toxicity The table below indicates toxicological information for specific ingredients at concentrations indicated. If no table appears, no toxicological information was found.

Chronic Toxicity Reports have associated repeated and prolonged occupational overexposure to petroleum based products with liver, kidney, brain and nervous system damage. There is, however, no reported human evidence that these effects occur when exposure is maintained below OSHA and ACGIH limits.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. If no table appears, no toxicological information was found.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity and biodegradability of this complete mixture have not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water and should not be considered readily biodegradable. If information is available on any of the individual components of the mixture, it is presented in this section. If no information appears in this section, there is no ecotoxicity or biodegradability information available for any of the components of the mixture.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of contents/container in accordance with local regulation.

Chemical Name	California Hazardous Waste Status
Barium hydroxide, monohydrate	Toxic; Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

U.S. Regulations & Inventories The table below lists any regulatory or inventory listing information found for ingredients of this product which are considered hazardous. All other components are either listed on the inventories referenced or are exempt from listing. See Section 16 for explanation of column headings:

U.S. State Right-to-Know Regulations The table below lists any regulatory or inventory listing information found for ingredients of this product which are considered hazardous. All other components are either listed on the inventories referenced or are exempt from listing. See Section 16 for explanation of column headings:

Chemical Name	Calif. Prop. 65	Massachusetts	New Jersey	Pennsylvania	Rhode Island
Barium hydroxide, monohydrate		X	X	X	X

Canada Regulations & Inventories The table below lists any regulatory or inventory listing information found for ingredients of this product which are considered hazardous. All other components are either listed on the inventories referenced or are exempt from listing. See Section 16 for explanation of column headings:

Chemical Name	CAS-No	DSL	NDSL	WHMIS
Barium hydroxide, monohydrate	22326-55-2	-	-	D2B

This product has been classified in accordance with the hazard criteria of the Canadian CPR (Controlled Products Regulations) and the MSDS contains all the information required by the CPR.

International Regulations & Inventories The table below lists any regulatory or inventory listing information found for ingredients of this product which are considered hazardous. All other components are either listed on the inventories referenced or are exempt from listing. See Section 16 for explanation of column headings:

Chemical Name	EINECS	AICS	CHINA	ENCS	PICCS
Barium hydroxide, monohydrate	-	X	-	-	X

16. OTHER INFORMATION

Regulatory Lists Searched & Other Sources of Information

ACGIH - American Conference of Governmental Industrial Hygienists

ADN - European Agreement for International Carriage of Dangerous Goods by Inland Waterways

ADR - European Agreement for International Carriage of Dangerous Goods by Road

AICS - Australian Inventory of Chemical Substances

ANSI - American National Standards Institute

CAP65 - California Proposition 65 Hazard List

CAS - Chemical Abstract Services

CERCLA - Comprehensive Environmental Response, Compensation & Liability Act

CHINA - China Inventory

CPR - Canadian Controlled Products Regulations

DOT - United States Department of Transportation
DSL - Canada Domestic Substances List
EINECS - European Union (EU) European Inventory of Existing Commercial Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods Code
MARTK - Massachusetts Right To Know List
NDSL - Canada Non-Domestic Substances List
NFPA - United States National Fire Protection Association
NIOSH - United States National Institute for Occupational Safety & Health
NJRTK - New Jersey Right To Know List
NTP - United States National Toxicology Program
OSHA - United States Occupational Safety & Health Administration
PARTK - Pennsylvania Right To Know List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
RCRA - United States Resources Conservation & Recovery Act
RID - European Agreement for International Carriage of Dangerous Goods by Rail
RIHSL - Rhode Island Hazardous Substance List
SARA - United States Superfund Amendments & Reauthorization Act
TDG - Canada Transportation of Dangerous Goods Act
TSCA - US Toxic Substances Control Act
WHMIS - Canada Workplace Hazardous Materials Information System

Definitions

EC50 - Effective Concentration (Concentration of a compound where 50% of the expected effect is observed.)
LC50 - Lethal Concentration (The concentration in water that will kill 50% of the test animals within a specific period of time, usually 96 hours.)
LD50 - Lethal Dose (The single dose that will kill 50% of the test animals by any route other than inhalation such as by ingestion or skin contact.)
OEL - Occupational Exposure Limit
PEL - Permissible Exposure Limits
STEL - Short Term Exposure Limit
TLV - Threshold Limit Value
TWA - Time Weighted Average
TWAEV - Time Weighted Average Exposure Value

Revision Date 27-Jun-2014

End of MSDS