PRECISION [™] XL 5 MOLY EP0



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Version	5.1
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SECTION 1. IDENTIFICATION

Product name :	PRECISION ™ XL 5 MOLY EP0
Product code :	PXL5M0KGL, PXL5M0P17, PXL5M0DRL, PXL5M0CBG, PXL5M0, PXL5M0BLK
Manufacturer or supplier's det Telephone :	Petro-Canada America Lubricants LLC 2828 N. Harwood St., Suite 1300 Dallas TX 75201 United States 1-214-871-3555
Emergency telephone number	r
Emergency telephone num- : ber	CHEMTREC: 1-800-424-9300; Poison Control Centre: Consult local telephone directory for emergency number(s).
Recommended use of the che	mical and restrictions on use
Recommended use :	Precision XL 5 Moly EP greases are premium quality, multi- purpose greases used for transportation, mining, and general industrial applications.
Prepared by :	Product Safety: +1 905-491-0565

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CF 1910.1200)		
Skin sensitisation	: Category 1	
GHS label elements		
Hazard pictograms		
Signal word	: Warning	
Hazard statements	: May cause an allergic skin reaction.	
Precautionary statements	 Prevention: Avoid breathing mist or vapours. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. Response: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. Disposal: Dispose of contents/ container to an approved waste disposal 	

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	plant.	
Other hazards None known.		
IARC	No component of this product pres or equal to 0.1% is identified as pro firmed human carcinogen by IARC	obable, possible or con-
OSHA	No component of this product pres equal to 0.1% is on OSHA's list of	5
NTP	No component of this product pres equal to 0.1% is identified as a kno by NTP.	5

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Lubricating oils (petroleum), C15-30, hy-	72623-86-0	20 - 30
drotreated neutral oil-based; Baseoil —		
unspecified		
molybdenum disulphide	1317-33-5	5 - 10
Amines, C12-14-alkyl, C6-10-alkyl phos-	68603-55-4	1 - 5
phates		
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	72676-55-2	1 - 5
calcium carbonate	471-34-1	1 - 5
zinc bis[0,0-bis(2-ethylhexyl)]	4259-15-8	1 - 5
bis(dithiophosphate)		

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled	:	Move to fresh air. Artificial respiration and/or oxygen may be necessary. Seek medical advice.
In case of skin contact	:	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice. In the event of a known, or potential, high pressure injection injury, worker should obtain immediate medical evaluation.
In case of eye contact	:	Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids,

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		for at least 15 minutes. Obtain medical attention.	
If swallowed	:	Rinse mouth with water. DO NOT induce vomiting unless direct cian or poison control center. Never give anything by mouth to an un Seek medical advice.	
Most important symptoms and effects, both acute and delayed	:	First aider needs to protect himself.	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Unsuitable extinguishing media	:	No information available.
Specific hazards during fire- fighting	:	Cool closed containers exposed to fire with water spray.
Hazardous combustion prod- ucts	:	Carbon oxides (CO, CO2), sulphur oxides (SOx), phosphorus oxides (POx), zinc oxides (ZnOx), sulphur compounds (H2S), alkyl mercaptans, sulfides, smoke and irritating vapours as products of incomplete combustion.
Further information	:	Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- : tive equipment and emer- gency procedures	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene.
Environmental precautions :	Do not allow uncontrolled discharge of product into the envi- ronment.
Methods and materials for : containment and cleaning up	Prevent further leakage or spillage if safe to do so. Remove all sources of ignition. Soak up with inert absorbent material. Non-sparking tools should be used. Ensure adequate ventilation. Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

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Advice on protection against fire and explosion	:	None known.	
Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be plication area. Use only with adequate ventilation. In case of insufficient ventilation, wear equipment. Avoid contact with skin, eyes and cloth Do not ingest. Keep away from heat and sources of ig Keep container closed when not in use	suitable respiratory ing. gnition.
Conditions for safe storage	:	Store in original container. Containers which are opened must be kept upright to prevent leakage. Keep in a dry, cool and well-ventilated Keep in properly labelled containers. To maintain product quality, do not stor light.	place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based; Baseoil — unspeci- fied	72623-86-0	TWA (Inhal- able particu- late matter)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
molybdenum disulphide	1317-33-5	TWA (total dust)	15 mg/m3 (Molybdenum)	OSHA Z-1
		TWA (Inhal- able particu- late matter)	10 mg/m3 (Molybdenum)	ACGIH
		TWA (Res- pirable par- ticulate mat- ter)	3 mg/m3 (Molybdenum)	ACGIH
		TWA (Total dust)	10 mg/m3 (Molybdenum)	OSHA P0
calcium carbonate	471-34-1	TWA (Res- pirable)	5 mg/m3 (Calcium car- bonate)	NIOSH REL
		TWA (total)	10 mg/m3 (Calcium car- bonate)	NIOSH REL

Engineering measures

: No special ventilation requirements. Good general ventilation

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	should be sufficient to control work	
	contaminants.	er exposure to airborne
ment		
:	ventilation is provided or exposure that exposures are within recomme Respirator selection must be based exposure levels, the hazards of the	assessment demonstrates inded exposure guidelines. I on known or anticipated product and the safe
:	organic vapour filter	
:	neoprene, nitrile, polyvinyl alcohol ((PVA), Viton [®] .
:	approved standard should be worn	at all times when handling
:	Wear face-shield and protective supproblems.	it for abnormal processing
:		
:	Wash contaminated clothing before	ere-use.
:	ing the inside, before re-use.	
	ment : : : : :	 ment Use respiratory protection unless at ventilation is provided or exposure a that exposures are within recomme Respirator selection must be based exposure levels, the hazards of the working limits of the selected respire organic vapour filter neoprene, nitrile, polyvinyl alcohol (Chemical-resistant, impervious glow approved standard should be worn chemical products if a risk assessmessary. Wear face-shield and protective sui problems. Choose body protection in relation and amount of dangerous su cific work-place. Wash contaminated clothing before Remove and wash contaminated cling the inside, before re-use. Wash face, hands and any exposed

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Buttery, smooth, semi-solid	
Colour	: grey	
Odour	: Mild grease like.	
Odour Threshold	: No data available	
рН	: No data available	
Pour point	: -48 °C (-54 °F)Base Fluid Blend	
Boiling point/boiling range	: No data available	
Flash point	: 187 °C (369 °F) Method: Cleveland open cup Base Fluid Blend	

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Fire Point	:	205 °C (401 °F) Base Fluid Blend	
Evaporation rate	:	No data available	
Flammability	:	Low fire hazard. This material must be will occur.	heated before ignition
Auto-Ignition Temperature	:	No data available	
Upper explosion limit / Upper flammability limit	:	No data available	
Lower explosion limit / Lower flammability limit	:	No data available	
Vapour pressure	:	No data available	
Relative vapour density	:	No data available	
Relative density	:	No data available	
Density	:	0.9100 kg/l (15 °C / 59 °F)	
Solubility(ies)			
Water solubility	:	insoluble	
Partition coefficient: n- octanol/water	:	No data available	
Viscosity Viscosity, kinematic	:	132.7 cSt (40 °C / 104 °F) Base Fluid Blend	
		13.7 cSt (100 °C / 212 °F) Base Fluid Blend	
Explosive properties	:	Do not pressurize, cut, weld, braze, so pose containers to heat or sources of i	

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reac- tions	:	Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid	:	No data available
Incompatible materials	:	Reactive with oxidising agents, acids, alkalis and reducing agents.
Hazardous decomposition products	:	May release COx, NOx, SOx, POx, H2S, MoOx, KOx, SbOx, alkyl mercaptans, sulfides, metal oxides, diphenylamine, alde- hydes, alkenes, smoke and irritating vapours when heated to decomposition.

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely route Eye contact		•
Ingestion Inhalation		
Skin contact		
Acute toxicity		
Product:		
Acute oral toxicity	:	Remarks: No data available
Acute inhalation toxicity	:	Remarks: No data available
Acute dermal toxicity	:	Remarks: No data available
Components:		
Lubricating oils (petroleur fied:	n), C	15-30, hydrotreated neutral oil-based; Baseoil — unspeci-
Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg,
Acute inhalation toxicity	:	LC50 (Rat): > 5.2 mg/l
		Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg,
molybdenum disulphide:		$L_{\rm DE0}$ (Both ~ 2.000 mg/kg
Acute oral toxicity	•	LD50 (Rat): > 2,000 mg/kg,
Amines, C12-14-alkyl, C6- Acute oral toxicity		kyl phosphates: LD50 (Rat): > 5,000 mg/kg,
-		
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg,
calcium carbonate:		
Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg,
Skin corrosion/irritation		
Product:		
Remarks	:	No data available
Serious eye damage/eye iı	rritati	on
Product:		
Remarks	:	No data available
Respiratory or skin sensit	isatio	on
No data available		
Germ cell mutagenicity		
No data available		
net: lubricants petro-canada con	n/sde	Page

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Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	Remarks: No data available		
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available		
Toxicity to algae/aquatic plants	:	Remarks: No data available		
Toxicity to microorganisms	:	Remarks: No data available		
Persistence and degradability				
Product:				

Biodegradability : Remarks: No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 The product should not be allowed to enter drains, water courses or the soil. Offer surplus and non-recyclable solutions to a licensed disposal company. Waste must be classified and labelled prior to recycling or disposal. Send to a licensed waste management company. Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

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SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

Not regulated as a dangerous good

IMDG-Code Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

National Regulations

49 CFR Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

California Prop. 65	This product contains chemical(s) known to the State of Cali- fornia to cause cancer and/or to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. The chemicals include:			
cadmium	7440-43-9			
The components of this product are reported in the following inventories:				
TSCA :	All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.			
DSL :	On the inventory, or in compliance with the inventory			

SECTION 16. OTHER INFORMATION

Further information

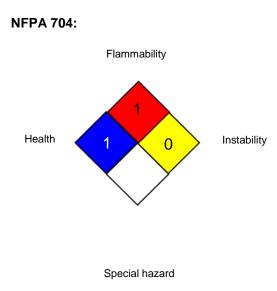
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HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH NIOSH REL OSHA P0	:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits USA. Table Z-1-A Limits for Air Contaminants (1989 vacated
OSHA Z-1	:	values) USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim- its for Air Contaminants
ACGIH / TWA	:	8-hour, time-weighted average
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA P0 / TWA OSHA Z-1 / TWA	:	8-hour time weighted average 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association: IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New

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Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumu-

ment; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

For Copy of SDS	:	Internet: lubricants.petro-canada.com/sds United States, telephone: 1-800-268-5850; fax: 1-800-201- 6285 For Product Safety Information: 1 905-491-0565
Prepared by	:	Product Safety: +1 905-491-0565
Revision Date Date format	:	2022/08/15 yyyy/mm/dd

The information is considered as correct, but not exhaustive, and will be used only as a guide, which is based in the current knowledge of the substance or mixture, and is applicable to proper safety precautions for the product.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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