Safety Data Sheet MX-EP



1. Identification	
Product identifier	MX-EP
Product code	AEMXEP425GDZ
Other means of identification	MX-EP, aerosol format. This SDS sheet is not for the product in liquid format.
Recommended use of the chemical and restrictions on use	Multipurpose chain lubricant.
Manufacturer	AEROCHEM Inc. 5977 Trans Canada Highway Pointe-Claire, QC H9R 1C1 Canada General Information: 1-888-592-5837 <u>www.aerochem.ca</u> info@aerochem.ca
Emergency phone number	INFOTRAC [®] : 1-800-535-5053 International call collect: 1-352-323-3500 24 hours/day, 7 days/week

2. Hazard identification

Summary FLAMMABLE AEROSOL! Content under pressure, do not puncture, cut, heat or throw container into the flames. Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Do not ingest. If medical advice is needed, have this SDS or label at hand. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

WHMIS 2015/GHS/OSHA HCS 2012



Flammable aerosols (Category 1)
Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2)
Specific target organ toxicity, single exposure, Narcotic effects (Category 3)
Aspiration hazard (Category 1)

DANGER

- H222: Extremely flammable aerosol
- H229: Pressurized container: may burst if heated
- H304: May be fatal if swallowed and enters airways
- H319: Causes serious eye irritation
- H315: Causes skin irritation
- H336: May cause drowsiness or dizziness
- P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.
- P211: Do not spray on an open flame or other ignition source.
- P251: Do not pierce or burn, even after use.
- P261: Avoid breathing vapours, mist and spray.
- P264: Wash skin thoroughly after handling.
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective gloves, protective clothing and eye protection.

P301+310+331: IF SWALLOWED: Immediately call a POISON CENTER or a physician. Do NOT induce vomiting.

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

P332+313: If skin irritation occurs: Get medical advice or attention.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or physician if you feel unwell.

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists: Get medical advice or attention.

P362+364: Take off contaminated clothing and wash before reuse.

P403: Store in a well-ventilated place.

P405: Store locked up.

P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P501: Dispose of contents and container to an approved waste disposal plant.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Naphtha (petroleum), hydrotreated heavy (C6-C13)	64742-48-9	15 - 40 %
Mineral oil	Mixture oil	10 - 30 %
Petroleum gases, liquefied, sweetened	68476-86-8	10 - 30 %
Stoddard solvent (Mineral Spirits)	8052-41-3	10 - 30 %
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	68457-79-4	1 - 5 %
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	0.1 - 1.5 %

Note: The mineral oil contained in this material may be described by one or more of the following CAS no: 64742-54-7, 64742-65-0, 64742-55-8, and 64742-56-9. The product is made at 99.9% of a mixture of these highly refined ingredients, containing no polycyclic aromatic hydrocarbon (PAH). The manufacturer withholds the actual concentration range of the ingredients as a trade secret.

4. First-aid	measures
Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.
Skin contact	Flush with water for at least 15 minutes. Remove contaminated clothing and wash before reuse. Avoid touching eyes with contaminated body parts. If a problem develops or persists, seek medical attention.
Eye contact	IMMEDIATELY flush with plenty of water. Remove contact lenses if easy to do. Flush with water for at least 15 minutes. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. If victim is conscious wash out mouth with plenty of water. Never give anything by mouth if victim is unconscious or convulsing. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	May cause redness and irritation to eyes. May cause dry skin and slight irritation. High concentrations may cause central nervous system depression characterized by headache, dizziness, vertigo, nausea, drowsiness and fatigue. Harmful or fatal if inhaled into the lungs (ingestion/vomiting). Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discolouration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.
Notes to the physician	Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures					
Suitable extinguishing media	Dry chemicals, water spray, chemical foam, carbon dioxide (CO2). Do not use a heavy water jet.				
Specific hazards arising from the chemical	Flammable aerosol. Content under pressure, containers may explode under fire conditions. Vapours are heavier than air and may travel to an ignition source distant from the material handling point. Contact with strong oxidizers may cause fire.				
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.				
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Water spray can reduce the intensity of the flames. However, the water jets can spread the fire. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.				

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry into sewers, closed areas and release to the environment.
Methods and materials for containment and cleaning up	Ventilate the area well. Remove sources of ignition. Absorb with inert material (soil, sand, vermiculite) or wipe with a cloth and place in an appropriate waste disposal container clearly identified. Use non-sparking and antistatic tools. Finish cleaning the contaminated surface by rinsing with soapy water. Dispose via a licensed waste disposal contractor.

7. Handling and	storage
Precautions for safe handling	Content under pressure, do not puncture, cut, heat or throw container into the flames. Keep away from heat, sparks and open flame. Use only in well ventilated area. Do not breathe vapours, mists or aerosols. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash before reuse.
Conditions for safe storage, including any incompatibilities	Keep in properly labelled containers. Store away from oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat. Keep away from freezing.
Storage temperature	<49°C (120.2°F)
Storage temperature	

8. Exposure con	ntrols/personal protection
Immediately Dangerous to Life or Health	Stoddard solvent (Mineral Spirits): 20000 mg/m3.

Naphtha (petroleum), hydrotreated heavy (C6-C13)		TWA (8h) Mist		5 mg/m ³	ACGIH , RSST		
				175 ppm	1200 mg/m ³	Other	
				300 ppm	Ū	OSHA	
Stoddard solvent (Minera	al Spirits)	STEL			580 mg/m ³	BC	
		TWA (8h)		290 mg/m ³	BC	
				100 ppm	525 mg/m ³	ACGIH , ON, RSST	
Petroleum gases, liquefie	ed, sweetened		Simple asphyxiant	1000 ppm	I	ACGIH , BC, ON, RSST	
Mineral oil		STEL	Mist		10 mg/m ³	RSST	
		TWA (8h) Mist		5 mg/m ³	ACGIH , RSST	
Distillates (petroleum), h naphthenic	ydrotreated heavy	STEL	Mist	\square	10 mg/m ³	RSST	
		TWA (8h			1 mg/m ³	BC	
			Mist		5 mg/m ³	ACGIH , ON, RSST	
Appropriate	Provide sufficient mecha						
engineering controls	concentrations of vapour	rs, mists, a	erosols or dust be	low their re	spective occu	pational exposure	
	limits.						
Individual protection m	easures						
Eye	If there is a risk of contac	ct with eye	s, wear chemical s	splash gogg	gles.		
Hands		Wear nitrile or neoprene gloves. Disposable nitrile gloves can also be used, but discard after single use. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After					
		using gloves, hands should be washed and dried thoroughly.					
Skin		Personal prot <mark>ective equipment for the b</mark> ody should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer					
	code. Wear synthetic or a neoprene apron, if necessary, to prevent repeated or prolonged contact with skin.						
Respiratory	Respiratory protection is	not requir	ed for normal use	Where the	conditions in	the workplace require a	
ricopitatory	Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection						
	equ <mark>ipment</mark> (RPE) must b						
	and standard 29 CFR 19 NIOSH/MSHA. In case of						
	protection factor (APF) u					- U	
	vapour cartridges fitted v	vith P100 f	filters. For an APF	until maxim	num 100 times		
	a full face respirator mask with organic vapour cartridges and P100 filters.						
Feet	No personal protection n	neasure re	equired.				
		Canala	Nitrilo claves				
		Goggles	s Nitrile gloves				

9. Physical and chemical properties						
Physical state	Aerosol (liquid)	Flammability	Flammable.			
Colour	Tan	Flammability limits	1.1 to 6.1%			
Odour	Solvent	Flash point	65°C (149°F) Setaflash			
Odour threshold	N/Av.	Auto-ignition temperature	N/Av.			
рН	N/Ap.	Sensibility to electrostatic charges	Yes			

Melting point			Sensibility to sparks and/or friction	No	
Freezing point	N/Av.		Vapour density	>3.1 (Air = 1)	
Boiling point	170°C (338°F	-)	Relative density	0.81 kg/L (Water = 1)	
Solubility	Insoluble in water.		Partition coefficient n-octanol/water	N/Av.	
Evaporation rate	> Butyl Acetate		Decomposition temperature	N/Av.	
Vapour pressure	310.26kPa (2327 mm Hg)		Viscosity	8 cSt @ 40°C (104°F)	
Percent Volatile	N/Av.		Molecular mass	N/Ap.	
N/Av.: Not Available N/Ap.: Not Applicable			Und.: Undetermined N/E: Not Established		

10. Stability and reactivity	
Reactivity	No information available for this product.
Chemical stability	Stable under recommended storage conditions. Aerosol containers are unstable at temperatures above 49 °C.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Content under pressure, do not puncture, cut, heat or throw container into the flames. Avoid contact with incompatible materials.
Incompatible materials	Strong bases, strong acids, strong oxidizing agents (e.g. chlorine, fluorine, nitric acid, perchloric acid, peroxides, nitrates, chlorates, chromates, permanganates and perchlorates).
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	Naphtha (petroleum), hydrotreated heavy (C6-C13)	U	>10000 mg/kg >8.5 mg/l/4h >3200 mg/kg	Rat Rat Rabbi	LD50 LC50 t LD50
	Petroleum gases, liquefied, sweetened	Inhalation	520400 ppm/2h	Rat	LC50
	Mineral oil	Ingestion	>2000 mg/kg	Rat	LD50
		Skin	>5000 mg/kg	Rabbi	t LD50
	Stoddard solvent (Mineral Spirits)	Ingestion	>5000 mg/kg	Rat	LD50
		Inhalation	>12 mg/l/4h	Rat	LC50
		Skin	>3000 mg/kg	Rabbi	t LD50
	Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters,				
	zinc salts	Ingestion	3600 mg/kg	Rat	LD50
		Skin	>20000 mg/kg	Rabbi	t LD50
	Distillates (petroleum), hydrotreated heavy naphthenic	Ingestion	>5000 mg/kg	Rat	LD50
		Inhalation	>5 mg/l/4h	Rat	LC50
		Skin	>5000 mg/kg	Rabbi	t LD50
Likely routes of exposure	Skin, eyes, inhalation, ingestion.				

Delayed,	Eye contact	May cause severe eye irritation or eye damage. The alkyldithiophosphate zinc salts									
immediate and chronic effects		cause irreversible effects on the rabbit eye (OECD Guideline 405). Eye Irritation/Corrosion, Rabbit (OECD TG 405): tests performed with the other ingredients of this mixture gave not irritating to slightly irritating results.									
	Skin contact	May cause redness and irritation of the skin. Prolonged or repeated exposure can cause skin drying, defatting and dermatitis. Stoddard solvent (CAS no 8052-41-3) may cause moderate irritation and slight edemas when applied to the skin of the rabbit for 4 hours. The alkyldithiophosphate zinc salts is irritating on rabbit skin (OECD Guideline 404). Skin Irritation/Corrosion, Rabbit (OECD 404) : tests performed with the other ingredients of this mixture gave not irritating to slightly irritating results. Inhalation of vapours may cause central nervous system depression such as drowsiness, headache, dizziness, vertigo, nausea and fatigue. Inhalation in large amounts of petroleum gases (CAS no 68476-86-8) may cause asphyxiation. The severity of symptoms may vary depending on exposure conditions.									
	Inhalation										
	Ingestion	Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discolouration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.									
		Ingredients present at levels greater than or equal to 0.1% of this product are not skin									
	sensitization	or respiratory sensitizers.									
	IARC/NTP	No ingredients listed.									
	Classification										
	Carcinogenicity	Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.									
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.									
	Reproductive	Ingredients in this product present at levels greater than or equal to 0.1% are not									
	toxicity	known to cause reproduction effects.									
	Specific target organ toxicity - single exposure	Central nervous system.									
	Specific t <mark>arget</mark> organ toxicity - repeated exposure	No target organ is listed.									
Interactive effects	No information availa	ble.									
Other information	mg/kg. The acute tox	ute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 icity estimate (ATE) by inhalation (aerosol/mist) of the mixture was calculated to be 4h. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.									

12. Ecologic	al information		
Ecological toxicity	Fish - Oncorhynchus mykiss - Rainbow trout	LC50	4.5 mg/L; 96h (CAS no 68457-79-4) OECD 203
	Aquatic Invertebrate - Daphnia magna (static)	EC50	23 mg/L; 48h (CAS no 68457-79-4) OECD 202
	Aquatic Plant - Algea, Desmodesmus subspicatus	EC50	21 mg/L; 72h (CAS no 68457-79-4) OECD 201
	Pseudokirchneriella subcapitata - Aquatic plant	EC50	1.5 mg/L; 72h (CAS no 8052-41-3)
	Crustacea (Daphnia magna)	EC50	0.42-2.3 mg/L; 48h (CAS no 8052-41-3)
	Fish - Pimephales promelas - Fresh water	LC50	8.2 mg/L; 96 h (64742-48-9)
	Aquatic Invertebrate - Daphnia magna	EC50	4.5 mg/L; 48 h (64742-48-9) OECD 202
	Fish - Fathead minnow, Pimephales promelas - fresh water	LC50	154 mg/L; 96h (Mineral oil)
Persistence	Contains an or many ingredients that may be persistent	in aqua	atic environment.

Degradability	The product is a hydrocarbon mixture of which some ingredients are not readily biodegradable. The alkyldithiophosphate zinc salts family compounds are hydrolytically stable at pH 4, 7 and 9 (OECD 111). They are not readily biodegradable (1.5%) in 28 days (OECD 301B).					
Bioaccumulative potential	Contains oils that have a high potential to bioaccumulate. The mineral oil mixture should bioaccumulate according to its high partition coefficient (Log Kow 10.88). The alkyldithiophosphate zinc salts family compounds have a Bioconcentration Factor (BCF) value of less than 2000 in fish and a low partition coefficient Log Kow of 0.69, indicating a low potential for bioaccumulation.					
Mobility in soil	The product is a hydrocarbon mixture of which some ingredients can evaporate into the air while others present a medium to low mobility in soil. The alkyldithiophosphate zinc salts family compounds are slightly soluble in water. They should have a medium to low mobility in soil.					
Other adverse effects	This chemical does not deplete the ozone layer.					

13. Disposal considerations

Container

Important! Prevent waste generation. Use in full. DO NOT pierce, cut, heat, or burn the container, even after use. DO NOT dispose residue in sewers, streams or drinking water supply. Depressurize empty container (empty it of its propellant). Non-use oils, organic solvents and wastes residues can be reprocessed (recycle) where there is a recovery program. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport in	formation			
UN Number	UN 1950			
UN Proper Shipping Name	AEROSOLS			
Environmental hazards	This material does not contain marine pollutant.			
Special precautions for user	Permit required for transportation with proper DANGER placards displayed on vehicle. Exemption available: LTD QTY according to TDG Canada - art. 1.17; Mode of transportation: rail, sea and road, applicable for Canadian domestic shipments. Quantitative limits: applicable for aerosol cans containing =< 1L each.			
TDG - Transportation of	of Dangerous Goods (Canada)			
Transport hazard class(es)	Class 2.1			
Packing group				
Emergency response guidebook 2016	126			
IMO/IMDG - Internation	nal Maritime Transport			
Classification	UN 1950. AEROSOLS. Class 2.1, Emergency schedules (EmS-No) F-D, S-U			
IATA - International Ai	r Transport Association			
Classification	UN 1950. AEROSOLS, FLAMMABLE. Class 2.1.			
	s are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper ckaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.			

15. Regulatory information

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Naphtha (petroleum), hydrotreated heavy (C6-C13)	64742-48-9		х		
Mineral oil	Mixture oil		Х		
Petroleum gases, liquefied, sweetened	68476-86-8		Х		Х
Stoddard solvent (Mineral Spirits)	8052-41-3	Х	Х		Х
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	68457-79-4	x	x	ТЛЛ	
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5		x		IVID

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- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act

- DSL: Domestic Substances List Inventory

- NDSL: Non-Domestic Substances List Inventory

- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA

Common name	CAS	TSCA	CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Prio.
Naphtha (petroleum), hydrotreated heavy (C6-C13)	64742-48-9	х								
Mineral oil	Mixture oil	Х								
Petroleum gases, liquefied, sweetened	6847 <mark>6-86-8</mark>	х								
Stoddard solvent (Mineral Spirits)	805 <mark>2-41-3</mark>	х								
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	68457 <mark>-79-4</mark>	х								
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5									

- TSCA: Toxic Substance Control Act

- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances

- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals

- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances

- CAA 112(b) HON: Clean Air Act Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act Hazardous Air Pollutants lists pollutants

- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention

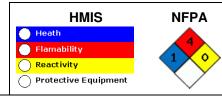
- CWA 311: Clean Water Act - List of Hazardous Substances

- CWA Priority: Clean Water Act - Priority Pollutant list

California Proposition 65

No ingredients listed.

Other regulations	



16. Other information

Date (YYYY-MM-DD)	AEROCHEM Inc. 2020-03-03
Version	04
Other information	REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, https://haz-map.com/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca - EPA ACTOR (Aggregated Computational Toxicology Resource) http://actor.epa.gov/actor/faces/ACTORHome.jsp DATE OF FIRST VERSION OF SDS: 2016-02-03. CHANGES MADE IN THE VERSION 02: sections 3 and 15. DATE OF SECOND VERSION OF SDS: 2018-07-18. CHANGES MADE IN THE VERSION 03: sections 2 and 3. DATE OF THIRD VERSION OF SDS: 2019-07-31. CHANGES MADE IN THE VERSION 04: section 1. ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMS: Hazardous Materials Identification System NFPA: National Stety and Health Administration (USA) NICSH: National Isitute for Occupational Safety and Health NTP: National Safety and Health Administration (USA) NICSH: National Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STE: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System NARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STE: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System
Powered by	To the best of our knowledge, the information contained herein is accurate. However, neither Prī¿½ventis System nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
A global vision of prevention	