



# Safety Data Sheet PAO-GEAR EPXS 220

SDS Revision Date:

03/14/2024

## 1. Identification

### 1.1. Product identifier

**Product Identity**

PAO-GEAR EPXS 220

**Alternate Names**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use**

See Technical Data Sheet.

**Application Method**

See Technical Data Sheet.

### 1.3. Details of the supplier of the safety data sheet

**Company Name**

PAN AMERICAN LUBRICANTS  
2419 S. 153<sup>RD</sup> ST  
OMAHA, NE 68144  
USA

**Emergency**

**CHEMTREC (USA)**

(800) 424-9300

**Customer Service:**

Phone: (402) 502-1229

## 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

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



### Warning

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.

P313 Get medical advice / attention.

P321 Specific treatment (see information on this label).

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

P363 Wash contaminated clothing before reuse.

**[Storage]:**

No GHS storage statements

**[Disposal]:**

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

### 3. Composition/information on ingredients

This product is considered a mixture.

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
Dec-1-ene, homopolymer, hydrogenated CAS Number: 0068037-01-4	50 - 75	Not Classified	
Polybutene CAS Number: 0009003-29-6	25 - 50	Not Classified	
Diisodecyl phthalate CAS Number: 0026761-40-0	1.0 - 10	Not Classified	
Polysulfides, di-tert-Bu CAS Number: Proprietary	0.10 - 1.0	Skin Sens. 1;H317	[1]
PHENYL-1-NAPHTHYLAMINE CAS Number: 0000090-30-2	0.10 - 1.0	Acute Tox. 4;H302 Skin Sens. 1;H317 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C1 CAS Number: EC# 931-384-6	0.10 - 1.0	Acute Tox. 4;H302 Flam. Liq. 3;H226 Skin Sens. 1;H317	[1]
Naphthalenesulfonic acid, dinonyl-, calcium salt CAS Number: 0057855-77-3	0.10 - 1.0	Skin Irrit. 2;H315 Eye Irrit. 2;H319 Skin Sens. 1;H317	[1]

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.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### 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.

<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	
<b>Overview</b>	See section 2 for further details if applicable.
<b>Skin</b>	May cause an allergic skin reaction.

## 5. Fire-fighting measures

### 5.1. Extinguishing media

Dry chemical, foam, carbon dioxide or water spray.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: None under normal use.

Avoid breathing dust / fume / gas / mist / vapors / spray.

### 5.3. Advice for fire-fighters

In the event of fire, wear full protective clothing and NIOSH Approved Self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapors.

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## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Use personal protective equipment.

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

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

Use a non-combustible material like vermiculite, sand or earth to soak up product and place in a container for later disposal.

Dike for disposal and cover with wet sand or earth.

## 7. Handling and storage

### 7.1. Precautions for safe handling

See section 2 for further details.

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store in a cool dry place.

Keep containers tightly closed.

Incompatible materials: Incompatible with strong oxidizing agents

See section 2 for further details.

### 7.3. Specific end use(s)

No data available.

## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0000090-30-2	PHENYL-1-NAPHTHYLAMINE	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0009003-29-6	Polybutene	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0026761-40-0	Diisodecyl phthalate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0057855-77-3	Naphthalenesulfonic acid, dinonyl-, calcium salt	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0068037-01-4	Dec-1-ene, homopolymer, hydrogenated	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
EC# 931-384-6	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C1	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
Proprietary	Polysulfides, di-tert-Bu	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

#### Carcinogen Data

CAS No.	Ingredient	Source	Value
0000090-30-2	PHENYL-1-NAPHTHYLAMINE	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0009003-29-6	Polybutene	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

0026761-40-0	Diisodecyl phthalate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0057855-77-3	Naphthalenesulfonic acid, dinonyl-, calcium salt	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0068037-01-4	Dec-1-ene, homopolymer, hydrogenated	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
EC# 931-384-6	Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C1	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
Proprietary	Polysulfides, di-tert-Bu	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

## 8.2. Exposure controls

<b>Respiratory</b>	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
<b>Eyes</b>	Safety glasses with side shields
<b>Skin</b>	Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact.
<b>Engineering Controls</b>	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.
<b>Other Work Practices</b>	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

## 9. Physical and chemical properties

<b>Appearance</b>	Clear and bright
<b>Odor</b>	Mild
<b>Odor threshold</b>	Not Measured
<b>pH</b>	Not Measured
<b>Melting point / freezing point</b>	Not Measured
<b>Pour Point</b>	-37C
<b>Initial boiling point and boiling range</b>	Not Measured
<b>Flash Point</b>	221C
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured
<b>Vapor pressure (Pa)</b>	Not Measured
<b>Vapor Density</b>	Not Measured

<b>Specific Gravity</b>	0.87
<b>Solubility in Water</b>	Not Measured
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	220.0 @ 40C

**9.2. Other information**

No other relevant information.

## 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 data available.

**10.4. Conditions to avoid**

None known.

**10.5. Incompatible materials**

Incompatible with strong oxidizing agents

**10.6. Hazardous decomposition products**

None under normal use.

## 11. Toxicological information

**Acute toxicity**

Product is safe for intended use based on the formulation, testing results and the long history of safe consumer use.

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
Dec-1-ene, homopolymer, hydrogenated - (68037-01-4)	> 5,000.00, Rat - Category: NA	3,000.00, Rabbit - Category: 5	No data available	4,800.00, Rat - Category: NA	No data available
Polybutene - (9003-29-6)	No data available	No data available	No data available	No data available	No data available
Diisodecyl phthalate - (26761-40-0)	9,700.00, Rat - Category: NA	2,900.00, Rabbit - Category: 5	No data available	No data available	No data available
Polysulfides, di-tert-Bu - (Proprietary)	No data available	No data available	No data available	No data available	No data available
PHENYL-1-NAPHTHYLAMINE - (90-30-2)	1,625.00, Rat - Category: 4	> 5,000.00, Rabbit - Category: NA	No data available	No data available	No data available
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C1 - (EC# 931-384-6)	No data available	No data available	No data available	No data available	No data available

Naphthalenesulfonic acid, dinonyl-, calcium salt - (57855-77-3)	No data available	No data available	No data available	No data available	No data available
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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).

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

## 12. Ecological information

### 12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

#### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Dec-1-ene, homopolymer, hydrogenated - (68037-01-4)	Not Available	Not Available	Not Available
Polybutene - (9003-29-6)	Not Available	Not Available	Not Available
Diisodecyl phthalate - (26761-40-0)	Not Available	Not Available	Not Available
Polysulfides, di-tert-Bu - (Proprietary)	Not Available	Not Available	Not Available
PHENYL-1-NAPHTHYLAMINE - (90-30-2)	0.44, Oncorhynchus mykiss	0.30, Daphnia magna	Not Available
Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C1 - (EC# 931-384-6)	Not Available	Not Available	Not Available
Naphthalenesulfonic acid, dinonyl-, calcium salt - (57855-77-3)	Not Available	Not Available	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

This product contains no PBT/vPvB chemicals.

**12.6. Other adverse effects**

No data available.

**13. Disposal considerations**

**13.1. Waste treatment methods**

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

**14. Transport information**

	<b>DOT (Domestic Surface Transportation)</b>	<b>IMO / IMDG (Ocean Transportation)</b>	<b>ICAO/IATA</b>
<b>14.1. UN number</b>	Not Applicable	Not Regulated	Not Regulated
<b>14.2. UN proper shipping name</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable	<b>IMDG:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: No		
<b>14.6. Special precautions for user</b>	No further information		

**15. Regulatory information**

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

**Toxic Substance Control Act ( TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**WHMIS Classification** D2B

**US EPA Tier II Hazards**

**Fire:** No  
**Sudden Release of Pressure:** No  
**Reactive:** No  
**Immediate (Acute):** Yes  
**Delayed (Chronic):** No

**EPCRA 311/312 Chemicals and RQs:**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**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%):**

Di-isodecyl phthalate (DIDP)

**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.

**New Jersey RTK Substances (>1%):**

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

**Pennsylvania RTK Substances (>1%):**

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

## 16. Other information

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:

H226 Flammable liquid and vapor.

H302 Harmful if swallowed.

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.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

The information provided on the SDS is a correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

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