



SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: CPI®-4126-100

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

Identified uses: Not determined.

Uses advised against: Not determined.

1.3 Details of the supplier of the safety data sheet

Supplier

Company Name: LUBRIZOL SOUTH AFRICA (PTY) LTD

Address: 12 JOYNER ROAD, PROSPECTON
ISIPINGO BEACH,,
ZA

Telephone: +27 (0) 319135800

E-mail contact:

1.4 Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 703 527 3887 OR WITHIN SOUTH AFRICA
800983611 (LUBRIZOL)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Chronic hazards to the aquatic environment Category 3 H412: Harmful to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended.

R52/53

The full text for all R-phrases is displayed in section 16.

2.2 Label elements according to Regulation (EC) No 1272/2008 as amended

Signal Words: not applicable

Hazard Statement(s): H412: Harmful to aquatic life with long lasting effects.

Precautionary Statement

Disposal: P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Supplemental label information

not applicable

2.3 Other hazards: None identified.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Regulation No. 1272/2008.

Chemical name	Concentration	EC No.	REACH Registration No.	M-Factor:	Notes
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	1.0 - 10%	Confidentiality Pending	01-2119488911-28		
Tricresylphosphate	0.1 - 1.0%	215-548-8			
Diphenylamine	0.1 - 1.0%	204-539-4			#
Phosphate, trixylyl	<0.1%	246-677-8		Acute: 10 Chronic: 10	

This substance has workplace exposure limit(s).

600, 700 and 900 ECHA List Numbers do not have any legal significance; rather they are purely technical identifiers and are displayed for informational purposes only.

Classification Regulation No. 1272/2008.

Chemical name	Classification	Notes
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	Aquatic Chronic 4; H413	
Tricresylphosphate	Repr. 2; H361 Aquatic Chronic 1; H410 Aquatic Acute 1; H400	
Diphenylamine	Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Dam. 2; H319	
Phosphate, trixylyl	Repr. 1B; H360F Aquatic Acute 1; H400 Aquatic Chronic 1; H410 STOT RE 2; H373	

Directive 67/548/EEC.

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Classification Directive 67/548/EEC.

Chemical name	Classification	Notes
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	R53	
Tricresylphosphate	N; R50/53 Repr. 3; Xn; R62	
Diphenylamine	T; R23/24/25 R33 N; R50/53	
Phosphate, trixylyl	Repr. 2; R60 N; R50/53 Xn; R48/22	

The full text for all R-phrases is displayed in section 16.

SECTION 4: First aid measures

General:

IF exposed or concerned: Get medical advice/attention.

4.1 Description of first aid measures

Inhalation:	Remove exposed person to fresh air if adverse effects are observed.
Eye contact:	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.
Skin Contact:	Wash with soap and water. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.
Ingestion:	Treat symptomatically. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed: See section 11.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards:	No data available.
Treatment:	Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: Use water to cool containers exposed to fire.

5.1 Extinguishing media

Suitable extinguishing media: CO₂, dry chemical, foam, water spray, water fog.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture: A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

5.3 Advice for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Recommend wearing self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas.

6.2 Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up: Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

6.4 Reference to other sections:

See sections 8 and 13 for additional information.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Launder contaminated clothing before reuse. Avoid environmental contamination. Keep container closed when not in use and use with adequate ventilation. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of product.

Maximum Handling Temperature:

Not determined.

7.2 Conditions for safe storage, including any incompatibilities:

Store away from incompatible materials. See section 10 for incompatible materials.

Maximum Storage Temperature:

Not determined.

7.3 Specific end use(s):

End uses are listed in an attached exposure scenario when one is required.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	type	Exposure Limit Values	Source
Diphenylamine	STEL	20 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)
Diphenylamine	TWA	10 mg/m ³	UK. EH40 Workplace Exposure Limits (WELs) (12 2011)

8.2 Exposure controls

Appropriate engineering controls:

No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information:

Use personal protective equipment as required.

Eye/face protection:

If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand Protection:

Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water. Suitable gloves can be recommended by the glove supplier.

Other:

Gloves, coveralls, apron, boots as necessary to minimize contact. Long sleeve shirt is recommended.

Respiratory Protection:	Use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus (SCBA) for entry into a confined space as the natural decomposition of this material will lower the available oxygen in the air. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.
Hygiene measures:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.
Environmental Controls:	No data available. See section 6 for details.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless to yellow
Odor:	Mild
Odor Threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	248.9 °C (Cleveland Open Cup)
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Relative density:	0.93 (20 °C)
Solubility(ies)	
Solubility in Water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.
VOC Content:	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity:	No data available.
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10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of Hazardous Reactions:	Will not occur.
10.4 Conditions to Avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials.
10.5 Incompatible Materials:	Strong acids. Strong bases. Strong oxidizing agents.
10.6 Hazardous Decomposition Products:	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Ingestion:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product:	ATEmix > 10.000 mg/kg. Ingestion can cause central nervous system effects such as headache, dizziness, drowsiness, and generalized weakness.
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Dermal

Product:	ATEmix > 5000 mg/kg
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Inhalation

Product:	Not classified for acute toxicity based on available data.
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Skin Corrosion/Irritation:

Product:	Not classified as a primary skin irritant.
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Serious Eye Damage/Eye Irritation:

Product:	Remarks: Not classified as a primary eye irritant.
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Respiratory sensitization:

No data available

Skin sensitization:

Diphenylamine	Classification: Not a skin sensitizer. (Literature)
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Specific Target Organ Toxicity - Single Exposure:

Tricresylphosphate
If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Diphenylamine
Exposure to a high concentration of vapor or mist may be irritating.

Phosphate, trixylyl

If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Aspiration Hazard:

No data available

Other effects:

Diphenylamine

Kidney Blood Liver

Phosphate, trixylyl

Prolonged or repeated exposure to trixylenyl phosphate by inhalation, ingestion, or skin absorption may cause nerve damage and cholinesterase inhibition.

Chronic Effects

Carcinogenicity:

No data available

Germ Cell Mutagenicity:

Reaction products of
Benzeneamine, N-phenyl- with
nonene (branched)
Diphenylamine

This material has not exhibited mutagenic or genotoxic potential in laboratory tests.

The Ames Salmonella test for mutagenicity was negative for this product. The mouse micronucleus and the rat hepatocyte UDS tests for genotoxicity were negative for diphenylamine.

Reproductive toxicity:

Tricresylphosphate

Suspected of damaging fertility.
This material has been shown to impair fertility and cause adverse reproductive effects in rats and mice.

Tricresylphosphate

Suspected of damaging fertility.
This material has been shown to impair fertility and cause adverse reproductive effects in rats and mice.

Diphenylamine

There are conflicting reports in the literature concerning the teratogenicity of diphenylamine. However, because the predominant route of exposure was oral (via gavage or diet) and relatively high dose levels were administered in the studies where positive effects were observed, it would not seem to present a workplace hazard.

Phosphate, trixylyl

Treatment-related microscopic changes in the reproductive organs were observed in rats treated with trixylenyl phosphate by oral administration.

Specific Target Organ Toxicity - Repeated Exposure:

Tricresylphosphate

Repeated occupational exposure to tricresyl phosphate over a prolonged period of time may cause delayed neurotoxicity characterized by ataxia and tremors.

Diphenylamine

A two year feeding study in rats and dogs of diphenylamine demonstrated liver, kidney and blood cell damage. The effect was observed at levels as low as 100 ppm. A five month feeding study in rats of 1% diphenylamine produced renal cystic disease. A dose-dependent increase in Heinz body formation was evident during a

Phosphate, trixylyl	<p>12 week study of 5 to 1000 ppm. The no effect level was at 10 ppm. Dermal: Target Organ(s): Liver, Kidney Inhalation: Target Organ(s): Kidney, Liver Oral: Target Organ(s): Liver, Kidney</p> <p>Repeated occupational exposure to Trixylyl phosphate over a prolonged period of time may cause delayed neurotoxicity characterized by ataxia and tremors. Unknown: Target Organ(s): Central nervous system. Oral: Target Organ(s): adrenal gland, testes, Liver, ovaries</p>
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SECTION 12: Ecological information

12.1 Ecotoxicity

Fish

Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	LC 50 (Zebra Fish, 4 d): > 100 mg/l
Tricresylphosphate	LC 50 (Rainbow Trout, 4 Days): 0.6 mg/l NOEC (Rainbow Trout, 4 Days): 0.56 mg/l
Diphenylamine	LC 50 (Not reported, 2 d): 2.2 mg/l
Phosphate, trixylyl	LC 50 (Fathead Minnow, 4 d): 1.1 mg/l LC 50 (Rainbow Trout, 4 d): > 100 mg/l

Aquatic Invertebrates

Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	EC 50 (Water flea (Daphnia magna), 2 d): > 100 mg/l
Tricresylphosphate	EC 50 (Water flea (Daphnia magna), 2 d): 0.146 mg/l
Diphenylamine	EC 50 (Water flea (Daphnia magna), 2 d): 0.31 mg/l
Phosphate, trixylyl	EC 50 (Water flea (Daphnia magna), 2 d): 0.06 mg/l

Toxicity to Aquatic Plants

Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 600 mg/l
Tricresylphosphate	EC 50 (Alga, 3 Days): 0.4042 mg/l
Diphenylamine	EC 50 (Green algae (Selenastrum capricornutum), 3 d): 1.51 mg/l
Phosphate, trixylyl	EC 50 (Alga, 2 d): 1 mg/l

Toxicity to soil dwelling organisms

No data available

Sediment Toxicity

No data available

Toxicity to Terrestrial Plants

No data available

Toxicity to Above-Ground Organisms

No data available

Toxicity to microorganisms

Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	EC 50 (Sludge, 0.1 d): > 1,000 mg/l
Tricresylphosphate	LC 50 (Sludge, 0.1 Days): > 1,000 mg/l

12.2 Persistence and Degradability

Biodegradation

Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	Carbon dioxide generation 0 % (28 d, OECD TG 301 B)
Tricresylphosphate	Oxygen depletion 24.2 % (28 d, OECD TG 301 D)
Diphenylamine	Oxygen depletion 26 % (28 d, OECD TG 301 D)
Phosphate, trixylyl	Dissolved organic carbon (DOC) 0 % (28 d, Miscellaneous)

BOD/COD Ratio

No data available

12.3 Bioaccumulative Potential

Bioconcentration Factor (BCF)

Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	Bioconcentration Factor (BCF): 1,584.89 (Measured)
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Partition Coefficient n-octanol / water (log Kow)

Tricresylphosphate	Log Kow: 5.93 (Measured)
Diphenylamine	Log Kow: 3.4 (calculated)
Phosphate, trixylyl	Log Kow: 5.6 (Measured)

12.4 Mobility:

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other Adverse Effects:

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging: Container packaging may exhibit hazards.

SECTION 14: Transport information

ADR

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.:

Inventory Status

Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

China (IECSC)

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

European Union (REACH)

To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH, or e-mail us at REACH_MSDS_INQUIRIES@Lubrizol.com

Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS)

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA)

All components of this product are listed on the Taiwan inventory.

United States (TSCA)

All components of this material are on the US TSCA Inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

**15.2 Chemical safety
assessment:**

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Key literature references and sources for data: Internal company data and other publically available resources.

Wording of the R-phrases and H-statements in section 2 and 3

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H360F	May damage fertility.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R33	Danger of cumulative effects.
R36	Irritating to eyes.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.
R60	May impair fertility.
R62	Possible risk of impaired fertility.

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