

# SAFETY DATA SHEET

### Classified as hazardous in accordance with the criteria of EPA New Zealand

### **Section 1 - Identification**

**Product Identifier** 

Product Name p-Terphenyl

**CAS No** 92-94-4

**Synonyms** 1,4-Diphenylbenzene

Molecular FormulaC18 H14Molecular Weight230.31

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Product Code 137920000; 137920250; 137921000; 137925000

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# Section 2 - Hazard(s) Identification

Classification under Work Safe New Zealand

Classified as hazardous in accordance with the criteria of EPA New Zealand

HSNO Approval Number HSR002503

**GHS Classification** 

Physical hazards

Based on available data, the classification criteria are not met

### **Health hazards**

Acute Oral ToxicityCategory 4Skin Corrosion/IrritationCategory 2Serious Eye Damage/Eye IrritationCategory 2Specific target organ toxicity - (single exposure)Category 3

**Environmental hazards** 

Based on available data, the classification criteria are not met

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#### **Label Elements**



Signal Word Warning

#### **Hazard Statements**

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

#### **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

#### Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

### **Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

### Other hazards which do not result in classification

Toxic to terrestrial vertebrates

## Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
p-Terphenyl	92-94-4	>95

### **Section 4 - First Aid Measures**

### Description of first aid measures

General Advice If symptoms persist, call a physician.

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**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

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medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically.

# **Section 5 - Fire Fighting Measures**

### **Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Extinguishing media which must not be used for safety reasons

No information available.

### **Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Thermal decomposition can lead to release of irritating gases and vapors.

### Special protective equipment and precautions for fire fighters

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

### **Section 6 - Accidental Release Measures**

### Personal Precautions, Protective Equipment and Emergency Procedures

#### **Emergency procedures**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

### **Environmental Precautions**

Should not be released into the environment.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

### Precautions to prevent secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations

### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

### **Section 7 - Handling and Storage**

### **Precautions for Safe Handling**

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### Advice on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

#### Conditions for Safe Storage, Including any Incompatibilities

#### **Storage Conditions**

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

### **Incompatible Materials**

Strong oxidizing agents.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

# **Section 8 - Exposure Controls and Personal Protection**

### **Control parameters**

#### **Exposure limits**

The product does not contain any hazardous materials with occupational exposure limits established.

### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### Appropriate engineering controls

### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Individual protection measures, such as personal protective equipment

Eye Protection Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial

applications)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments
Nitrile rubber, Neoprene,	See manufacturers	-	AS/NZS 2161	(minimum requirement)
Natural rubber, PVC.	recommendations			

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Skin and body protection Long sleeved clothing

**Repiratory Protection**Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment

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must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices

**Recommended Filter type:** Particulates filter conforming to EN 143 (or AUS/NZ equivalent)

Particle filtering: EN149:2001 (or AUS/NZ equivalent) Recommended half mask:-

When RPE is used a face piece Fit Test should be conducted

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

# **Section 9 - Physical and Chemical Properties**

#### Information on basic physical and chemical properties

**Physical State** Powder Solid

White **Appearance** Odor Odorless

**Odor Threshold** No data available рΗ No information available

**Melting Point/Range** 209 - 216 °C / 408.2 - 420.8 °F

**Softening Point** No data available **Boiling Point/Range** 383 °C / 721.4 °F

Flammability (liquid) Not applicable Solid

No information available Flammability (solid,gas)

**Explosion Limits** No data available

**Flash Point** 207 °C / 404.6 °F Method - No information available

**Autoignition Temperature** Not applicable No data available **Decomposition Temperature** 

**Viscosity** Not applicable Solid

Water Solubility Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

log Pow Component p-Terphenyl 6.03

**Vapor Pressure** No data available **Density / Specific Gravity** No data available **Bulk Density** No data available

**Vapor Density** Not applicable Solid

Particle characteristics No data available

Other information

C18 H14 Molecular Formula **Molecular Weight** 230.31

**Evaporation Rate** Not applicable - Solid

# Section 10 - Stability and Reactivity

Reactivity None known, based on information available

Stability Stable under normal conditions.

**Sensitivity to Mechanical Impact** No information available

Sensitivity to Static Discharge No information available

Hazardous polymerization does not occur. **Hazardous Polymerization** 

ACR13792 Version 2 10-Mar-2023 Page 5/9 Hazardous Reactions None under normal processing.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors.

# **Section 11 - Toxicological Information**

#### **Acute Effects**

### Information on likely routes of exposure

Product Information The toxicological properties have not been fully investigated

Inhalation Avoid breathing dust or spray mist. May be harmful if inhaled.

**Eyes** Avoid contact with eyes. Irritating to eyes. **Skin** Avoid contact with skin. May cause irritation.

**Ingestion** May be harmful if swallowed.

### Numerical measures of toxicity

(a) acute toxicity;

Oral Category 4
Dermal No data available
Inhalation No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
p-Terphenyl	LD50 > 10000 mg/kg (Rat)		

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

**Respiratory Skin**No data available
No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system

(i) STOT-repeated exposure; No data available

Target Organs No information available.

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(j) aspiration hazard; Not applicable

Solid

Symptoms / effects, both acute and delayed

No information available.

### **Section 12 - Ecological Information**

**Ecotoxicity** 

Aquatic ecotoxicity Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

**Terrestrial ecotoxicity**There is no data for this product

Persistence and Degradability

Persistence May persist.

Bioaccumulative Potential Product has a high potential to bioconcentrate

	Component	log Pow	Bioconcentration factor (BCF)
ı	p-Terphenyl	6.03	No data available

**Mobility**Spillage unlikely to penetrate soil. Is not likely mobile in the environment due its low water

solubility. Is not likely mobile in the environment due its low water solubility and propensity

to bind to soil particles

Other adverse effects

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

### **Section 13 - Disposal Considerations**

Waste treatment methods

Waste from Residues/Unused

**Products** 

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure

conformity with all applicable regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point.

Other Information Disposal agencies or waste contractors must comply with the New Zealand Hazardous

Substances (Disposal) Regulations . Waste codes should be assigned by the user based

on the application for which the product was used. Do not empty into drains.

# **Section 14 - Transport Information**

Not regulated

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IATA Not regulated

IMDG/IMO Not regulated

Environmental hazards No hazards identified

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable, packaged goods

**Special Precautions** 

No special precautions required. Please refer to the applicable dangerous goods

regulations for additional information.

Additional information None known

# Section 15 - Regulatory Information

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

### **National Regulations**

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

### Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information. Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

### Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

### International Regulations

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

Authorisation/Restrictions according to EU REACH

Not applicable

### International Inventories

New Zealand (NZIoC), Australia (AICS), Europe (EINECS/ELINCS/NLP), Korea (KECL), China (IECSC), Taiwan (TCSI), Japan (ISHL), Canada (DSL/NDSL), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	NZIoC	AICS	EINECS	ELINCS	NLP	KECL	IECSC	TCSI
p-Terphenyl	92-94-4	X	Х	202-205-2	-	-	KE-34733	X	X
Component	CAS No	TSCA	TSCA I	nventorv	DSL	NDSL	PICCS	ISHL	ENCS

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			notification - Active-Inactive					
p-Terphenyl	92-94-4	Х	ACTIVE	Х	-	-	Х	Х

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

### **Section 16 - Other Information**

# This safety data sheet complies with the requirements of the EPA Hazardous Substances (Hazard Classification) Notice 2020 and WorkSafe New Zealand Regulations

### Legend

NZIoC - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer NZS 5433:2020 - Transport of Dangerous Goods on Land

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%
WEL - Workplace Exposure Limit
DNEL - Derived No Effect Level

**POW** - Partition coefficient Octanol:Water **vPvB** - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

AICS - Australian Inventory of Chemical Substances

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists

PNEC - Predicted No Effect Concentration

**OECD** - Organisation for Economic Co-operation and Development **IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

 $\ensuremath{\mathbf{ADG}}$  - Australian Code for the Transport of Dangerous Goods by Road and Rail

LC50 - Lethal Concentration 50%

ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment NOEC - No Observed Effect Concentration

**BCF** - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

#### Key literature references and sources for data

HSNO classifications provided in the New Zealand Chemical Classification Information Database (CCID).

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

EPA Guide to classifying hazardous substances in New Zealand

EPA - Assigning a product to an existing HSNO approval guide

### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Revision Date 10-Mar-2023 Revision Summary Not applicable

### **Disclaimer**

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### **End of Safety Data Sheet**

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