



## Safety Data Sheet

Date of Issue: 01.10.2020

Date of Expiry: 01.10.2025

### 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : **ECP Limited**  
Address : PO Box 34125, Birkenhead, Auckland 0746  
Telephone : +64 9 480 4386  
Facsimile : +64 9 480 4385  
Emergency phone number : 0800 243 622 (24 hours)

Product	Diphenylamine			Code	22268 , 46101
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
122-39-4	HSR002712	3077	9	III	

Recommended use : Laboratory Investigations

### 2: Hazards identification

#### 2.1 GHS Classification

Acute toxicity, Oral (Category C), H301  
Acute toxicity, Inhalation (Category C), H331  
Acute toxicity, Dermal (Category C), H311  
Specific Target Organ Toxicity (Category B), H373  
Aquatic toxicity (Acute or Chronic) (Category A), H410

#### 2.2 GHS Label elements, including precautionary statements

##### Pictogram



Signal word : **Danger**

##### Hazard statement(s)

H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H331 Toxic if inhaled.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.

##### Precautionary statement(s)

###### Prevention

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash 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.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing.

##### Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P314 Get medical advice/ attention if you feel unwell.

P322 Specific measures (see supplemental first aid instructions on this label).

P330 Rinse mouth.

P361 Remove/Take off immediately all contaminated clothing.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

### Storage

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

P405 Store locked up.

### Disposal

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

## 2.3 Other hazards - none

### 3: Composition/information on ingredients

Substance / Mixture : Substance

#### 3.1 Substances

Formula : C<sub>12</sub>H<sub>11</sub>N

Molecular weight : 169.22 g/mol

CAS-No. : 122-39-4

EC-No. : 204-539-4

Index-No. : 612-026-00-5

#### Hazardous components

Component	Classification	Concentration
Diphenylamine	6.1 C; 6.9 B; 9.1 A; H301, H331, H311, H373, H410 M-Factor - Aquatic Acute: 10	<= 100 %

### 4: First aid measures

#### 4.1 Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### *If inhaled*

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

##### *In case of skin contact*

Wash off with polyethylene glycol and afterwards with plenty of water. Take victim immediately to hospital. Take off all contaminated clothing immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

##### *In case of eye contact*

Flush eyes with water as a precaution.

##### *If swallowed*

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

### 6: Accidental release measures

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

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in

suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

### 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

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

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

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits Table

Component	CAS No.	Value	Control parameters	Basis
Diphenylamine	122-39-4	WES-TWA	10 mg/m <sup>3</sup>	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

#### 8.2 Exposure controls

### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **Personal protective equipment**

#### *Eye/face protection*

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

#### *Skin protection*

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### *Body Protection*

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### *Respiratory protection*

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## **9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

#### a) Appearance

Form : crystalline  
Colour : white

b) Odour : No data available

c) Odour Threshold : No data available

d) pH : No data available

#### e) Melting point/freezing point

Melting point/range : 50 - 53 °C - lit.

#### f) Initial boiling point

and boiling range : 302 °C - lit.

g) Flash point : 153 °C - closed cup

h) Evaporation rate : No data available

i) Flammability (solid, gas) : No data available

j) Upper/lower flammability or explosive limits : No data available

k) Vapour pressure : 1 hPa at 108 °C

l) Vapour density : No data available

m) Relative density : 1.160 g/cm<sup>3</sup>

n) Water solubility : insoluble

#### o) Partition coefficient:

n-octanol/water : log Pow: 3.5

p) Auto-ignition temperature : No data available

q) Decomposition temperature : No data available

r) Viscosity : No data available

s) Explosive properties : No data available

t) Oxidizing properties : No data available

### **9.2 Other safety information**

Bulk density : 0.61 g/l  
Surface tension : 39.3 mN/m at 60 °C

## 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

Other decomposition products - No data available

In the event of fire: see section 5

## 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 1,120 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Respiratory disorder

Blood:Methemoglobinemia-Carboxyhemoglobin.

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### Aspiration hazard

No data available

### Additional Information

RTECS: JJ7800000

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Nausea, Vomiting, Liver injury may occur., Kidney injury may occur.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12: Ecological information

### 12.1 Toxicity

#### *Toxicity to fish*

LC50 - Pimephales promelas (fathead minnow) - 3.79 mg/l - 96.0 h

#### *Toxicity to daphnia and other aquatic invertebrates*

EC50 - Daphnia magna (Water flea) - 0.27 - 0.36 mg/l - 48 h

#### *Toxicity to algae*

EC50 - Desmodesmus subspicatus (green algae) - 0.048 mg/l - 72 h

IC50 - Desmodesmus subspicatus (green algae) - 1.5 mg/l - 72 h

### 12.2 Persistence and degradability

Biodegradability Result: - According to the results of tests of biodegradability this Product is not readily biodegradable.  
No data available

### 12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp)(Diphenylamine)

Bioconcentration factor (BCF): 253

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

No data available

## 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

## 14: Transport Information Table

	ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
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14.1	UN Number	3077	3077	3077
14.2	UN Proper Shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Diphenylamine)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Diphenylamine)	Environmentally hazardous substance, solid, n.o.s. (Diphenylamine)
14.3	Transport Hazard Class	9	9	9
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	Yes	Yes	Yes
14.6	Special precautions for user	No information available		
14.7	Incompatible materials	Strong oxidizing agents, Strong acids		

## 15: Regulatory information

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

#### National regulatory information

HSNO Approval Code: HSR002712

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006

Tracking Required: 6.1B

Approved Handler Cert.: not required

#### Notification status

AICS : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

## 16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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