

Revision: 2.0  
(Replaces revision 1.1 of 16 April 2021)Revision date: 21 April 2021  
Date printed: 12 August 2023**Section 1. Identification****1.1 Product Identifier** 0171

Product Name PHENYLHYDRAZINE

CAS Number 100-63-0

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula  $C_8H_8N_2 = 108.14$

**1.2 Relevant identified uses of the substance or mixture & uses advised against**

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

**1.3 Supplier** Vickers Laboratories Ltd

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**1.4 Emergency Telephone** (08:00-16:30) +44(0) 113 2362811  
(24hr) 112  
(Have this document to hand)**Section 2. Hazards Identification****2.1 Classification of the substance or mixture****Classification according to regulation 1272/2008/EC**

Acute toxicity, category 3 (oral)	H301: Toxic if swallowed.
Acute toxicity, category 3 (dermal)	H311: Toxic in contact with skin.
Acute toxicity, category 3 (inhalation)	H331: Toxic if inhaled.
Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.
Skin sensitization, category 1	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, category 2	H341: Suspected of causing genetic defects.
Carcinogenicity, category 1B	H350: May cause cancer.
Spec target organ tox - repeat, category 1	H372: Causes damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.

**2.2 Label elements****Labelling according to regulation 1272/2008/EC**

Signal word Danger

Hazard Pictograms



**Hazard Statements** Toxic if swallowed. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. May cause cancer. Suspected of causing genetic defects. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.

**Precautionary Statements** Obtain special instructions before use. Avoid breathing dust / fume / gas / mist / vapours / spray. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Phenylhydrazine	100-63-0	202-873-5		>97%	Acute Tox. 3 (O), Acute Tox. 3 (D), Acute Tox. 3 (I), Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Muta. 2, Carc. 1B, STOT RE 1, Aquatic Acute 1

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Water spray, foam, dry powder or carbon dioxide. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Do not use water jet.

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

Hazards	Vapour-air mixtures are explosive.
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### 5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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## Section 6. Accidental Release Measures

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

Personal Protection Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.

### 6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

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

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with copious amounts of water.

### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

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

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period)
Phenylhydrazine	100-63-0	>97%	-	-

Exposure data source(s) No occupational exposure data currently available.

### 8.2 Exposure controls

Respiratory Protection Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.

Hand Protection Use solvent resistant gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance Clear colourless liquid.

Odour No data available.

pH Not applicable

Boiling Point Not available

Melting Point	238 - 241°C
Flash Point	89°C (Closed cup)
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No data available.
Oxidising Properties	No.
Vapour Pressure	1.35hPa @ 60°C
Relative Density	1.098g/ml
Water Solubility	Not available

## 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatible Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	Burning will produce toxic fumes of NO <sub>x</sub> , carbon monoxide and/or carbon dioxide.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
Skin	Causes skin irritation.
LD50 Skin	Not available
Ingestion	Harmful if swallowed.
LD50 Oral	188mg/kg Rat
Inhalation	Toxic if inhaled. May cause respiratory tract irritation. Symptoms of exposure may include burning sensation, coughing, wheezing, shortness of breath,
LD50 Inhalation	2610mg/m <sup>3</sup> Rat
TCLo	Not available
Carcinogenicity	Carcinogenicity, category 1B. Classified as a potential human carcinogen.
Mutagenicity	Suspected of causing genetic defects.
Reproductive Effects	Evidence of reproductive effects.

## Section 12. Ecological

12.1	Toxicity	Harmful to aquatic life.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

## Section 14. Transport Information

14.1 UN Number	2572
14.2 Proper Shipping Name	Phenylhydrazine
14.3 Transport classes	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	D/E
14.4 Packing Group	II
14.5 Environment hazards	Marine pollutant.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Acute toxicity, category 3 (oral); Acute toxicity, category 3 (dermal); Acute toxicity, category 3 (inhalation); Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Skin sensitization, category 1; Germ cell mutagenicity, category 2; Carcinogenicity, category 1B; Spec target organ tox - repeat, category 1; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H301, H311, H315, H317, H319, H331, H350, H341, H372, H400  
Toxic if swallowed. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. May cause cancer. Suspected of causing genetic defects. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.

Precautionary Statements P201, P261, P273, P280, P301+P310, P305+P351+P338  
Obtain special instructions before use. Avoid breathing dust / fume / gas / mist / vapours / spray. Avoid release to the environment. Wear protective gloves / protective clothing / eye protection / face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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